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ABSTRACT

Title of Dissertation: Deciding to be Violent: The Perceived Utility of Abusive Behavior in Marriage

Randall Clifford Nedegaaard, Doctor of Philosophy, 1997

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Over the past three decades, spouse abuse has increasingly been recognized as a problem. Treatment programs include social skills training as a major component based on the assumption that violent men have social skills deficits. However, little empirical evidence supports this assumption. McFall's (1982) Social Information Processing Model (SIP) provides a framework to examine skill deficits in the areas of perception, decision making, and behavioral enactment. Abusive men are generally able to endorse nonviolent behavioral responses. Despite this recognition, they continue to use violence when angry. The purpose of this study was to investigate this incongruity by examining the decision making patterns of angered and non-angered abusive men in a laboratory setting. Using Multi-Attribute Utility Theory, a decision making model, the utility of abusive and nonabusive behaviors were compared among 32 mildly physically abusive men, 32 maritally distressed, nonabusive men, and 32 nondistressed, nonabusive men. All subjects were randomly assigned to an anger induction or neutral induction condition. As predicted, the utility for abusive behavior was greater for angry abusive men. A need to be in control appeared to significantly contribute to this difference. In addition, compared to all other groups the angry abusive subjects expected abusive and manipulative behaviors would be more likely to fix problems and would minimally impact their partner's self-image. Healthy behaviors were expected to have lower utilities comparing the abusers to other groups and comparing the angered to the non-angered abusers. However, for all subjects the utilities of healthy behaviors (e.g., compromise,

rethink your position) were greatest. In part, this may be explained by the abusers' perception that they were less able to perform the healthy behaviors. That is, the behaviors may be beneficial but they are not in an abuser's repertoire. Overall, distressed subjects' decision making patterns resembled the controls suggesting the study results were not the result of marital discord. The demonstration of specific decision making deficits among abusers supports a social information processing model (SIP) of battering behavior and aids in understanding the function of violent behavior. These findings have implications for enhancing specific skill training components of treatment for abusive men. In particular, the perceptual shift observed among the angered abusive men suggests that skill training should incorporate anger-induction.

Deciding to be Violent: The Perceived Utility of Abusive Behavior in Marriage.

by

Randall Clifford Nedegaard

Dissertation submitted to the Faculty of the

Department of Medical and Clinical Psychology

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INTRODUCTION

Overview

A wide variety of treatment programs for maritally violent men have been developed over the two decades (Goldolf, 1987; Jennings & Jennings, 1991). Early intervention programs were developed by diverse groups with differing philosophies and goals. As a result, programs evolved along different lines, and opinions about these programs remain divergent (Hamberger, 1997). Despite this diversity, most programs share the assumption that maritally violent men have social skill deficits, particularly in the areas of assertion and communication (see Figure 1 which summarizes the specific components of a variety of different treatment programs). It is assumed that such problems, combined with anger management deficits, result in the use of violence as a socially unskilled man attempts to resolve a maritally conflictual situation. Despite the popularity of these programs, most approaches lack an adequate empirical foundation and much of the empirical evidence that currently exists suffers from methodological limitations (e.g., low power, no control group; Gondolf & Foster, 1991). In addition, almost no research has been done to test which components of treatment are effective and for whom. The available literature suggests that maritally violent men may have some specific problems with negative perceptions of their spouses and with inappropriate behavioral response selection while in marital conflict (Gearan & Rosenbaum, 1997; Holtzworth-Munroe & Hutchinson, 1993). However, no empirical evidence exists that examines why maritally violent men choose to respond violently or which components of treatment might be necessary to adequately address maritally violent behavior.

The Phenomenon of Domestic Violence

Over the past two decades, it has become increasingly clear that domestic violence is a serious health issue that has profound implications for both it's victims and society in general. Through the combined efforts of the domestic violence advocacy community, individual practitioners, researchers, and professional societies, standards of care have

been developed for the medical community and major initiatives have been launched to increase public awareness (Warshaw, 1996). At the same time, a large amount of community resources have been devoted to the treatment of family violence. Unfortunately, most treatment approaches lacked an empirical foundation when they were initially designed and implemented. Despite widespread initiation of many treatments, adequate treatment outcome studies are just now being published (e.g., Brannen & Rubin, 1996; O'Leary, Heyman & Neidig, 1997).

Two factors seem to have had a profound impact on the development of interventions to address domestic violence. First, a ferocious theoretical debate has engrossed the field over the last several years and bitter fighting has occurred between the proponents of the various theoretical models. This debate appears to have influenced treatment efforts in one of two ways. Either treatment programs have been completely designed around a single theoretical approach (e.g., feminist; Pence & Paymar, 1993) or they have been eclectic in nature and have "borrowed" several interventions that were originally designed to be used with other populations (e.g., Neidig, 1985; Weeks, 1993) with theoretical influence being limited to the treatment modality (e.g., gender-specific for feminist approach versus couples based treatments for systems approaches). This debate has impeded the research in this area because differing approaches were criticized based upon philosophy rather than empirical evidence.

The second factor impacting intervention research has been studies exposing the substantial limitations in theories used to explain domestic violence, suggesting that many of these theories have been extended well beyond their limitations (Brannen & Rubin, 1996; Dutton, 1995; Warshaw, 1996). More current research has revealed that abusive individuals are a heterogeneous population with a large variety of biological, psychological, and sociological forces influencing their perceptions, decisions, and behavior and several authors are now suggesting expansion and integration of these theories (Hamberger & Renzetti, 1996; Goldner, 1992; Miller, 1996). One means of

expanding and integrating this research is to control for as many independent variables as possible by isolating specific issues, situations, and/or tasks in the laboratory in order to help identify cognitive and/or behavioral deficits in a given group (Barlow, Hays & Nelson, 1984; Myers, 1995). It is now clear that research focusing more specifically on the various cognitive and behavioral components of spouse abuse is necessary.

Prevalence

In 1992, 5,373 women in the United States were murdered (Kochanek & Hudson, 1995). About half were murdered by a spouse or someone with whom they had been intimate (Kellerman & Mercy, 1992). Annually, it is estimated that 2 to 4 million women (3% of all women) are severely assaulted by male partners or cohabitants in the United States (Novello, Rosenberg, Saltzman, & Shosky, 1992). Other estimates have placed the incidence at a much higher rate based on chronic underreporting of these assaults. Wilt and Olson (1996) reviewed the prevalence literature and reported that from 2.9% to 5% of women can expect to be victims of domestic violence at least once each year. Battering has been identified as a more common source of injury to women than motor vehicle crashes, assaults, and sexual assaults by a stranger combined (Grisso, Wishner, Schwartz, Weene, Holmes, & Sutton, 1992).

Recognition of this widespread problem has resulted in the American Psychiatric Association's official recognition of wife abuse in the Diagnostic and Statistical Manual, 4th Edition (DSM-IV) (APA, 1994) with the category, Physical Abuse of Partner. Not surprisingly, clinical samples reveal a significant correlation between marital distress and physical aggression. In clinical settings, one-third to one-half of couples assessed for marital distress report at least one incident of physical aggression in the past year (Cascardi et al., 1992; Holtzworth-Munroe et al, 1992; O'Leary, Vivian, & Malone, 1992). Interestingly, O'Leary et al (1992) reported the majority of these couples viewed relationship problems as primary and give very little weight to husband-to-wife aggression. This may be partially explained by the fact that the average level of severity of physical

aggression in this study was relatively low. O'Leary, Barling, Arias, Rosenbaum, Malone, & Tyree (1989) reported that less than 1% of young, newly married men engage in severe physical aggression such as beating or using weapons and Straus and Gelles (1990) found that only about 4% of men are severely physically aggressive toward their partners.

The Impact of Marital Violence

Marital violence is associated with several profound consequences. As described earlier, assaults on women by intimates can result in physical injury, severe emotional distress, and death. Victims of marital violence are likely to experience post-traumatic stress disorder and fear symptoms (Brown, 1987; Dutton, 1995; Saunders, 1994) Battered women are at increased risk of attempting suicide, abusing alcohol and other drugs, and suffering from depression (Straus & Gelles, 1990, Cascardi et al, 1992).

In addition to the trauma experienced by the victims within these violent relationships, society also suffers a tremendous burden. Projected medical expenses attributed to physical abuse total $3 billion to $5 billion annually (Domestic Violence Coalition, 1991). This does not account for indirect costs incurred from domestic violence such as those of lost productivity, the cost of judicial proceedings or the cost of incarceration of offenders. Roberts, O'Toole, Raphael, Lawrence and Ashby (1996) found that 23.9% of women and 8.5% of men using hospital emergency facilities disclose a history of domestic violence with 11.6% reporting current victimization (approximately 2% of all women reporting to the ER).

Despite widespread prevalence, health care professionals seldom recognize or address abuse (Abbott, Johnson, Koziol-McLain, & Lowenstein, 1995). Programs for addressing domestic violence in the health care setting began to appear in the 1980s, and a public health surveillance approach to violence was implemented to identify the extent of the problem, to identify risk groups and risk factors, and to support program development (Rosenberg & Mercy, 1992). The American Medical Association published guidelines for identification and treatment of domestic violence in 1992 (Flitcraft, Hadley, Hendrick-

Matthews, McLeer, & Warshaw) and the Joint Commission on Accreditation of Healthcare Organizations published standards for emergency departments and ambulatory care facilities in its 1992 Accreditation manual.

Concern for family violence in the field of medicine has grown at an extraordinary rate as is evidenced by massive efforts that are focused on the identification, referral, and treatment of spouse abuse in medical settings. In 1996 alone, numerous articles have been written to educate physicians and medical staff to detect and identify both victims and perpetrators of spouse abuse (e.g., Adams, 1996; Barkan & Gary, 1996; Freund, Bak, & Blackhall, 1996; McCoy, 1996; Olson et al, 1996), and to properly intervene (Chescheir, 1996; Easley, 1996; Steiner, Vansickle, & Lippmann, 1996; Hyman, 1996; Tintinalli, 1996). Recently, Dutton, Mitchell, and Haywood (1996) and Waller, Hohenhaus, Shah, and Stern (1996) both published validated emergency department screening and referral protocols for victims of domestic violence.

In summary, it is clear the problem of domestic violence is prevalent and has devastating affects on the individual and society. Treatment is widely available yet the effectiveness of existing treatments are largely unknown. What follows is a review of the literature focusing on a historical perspective of domestic violence. As mentioned earlier, a variety of multi-modal treatment programs have been developed over the past two decades, all of which have been influenced by at least one theoretical position. A brief history, an overview of the most recent treatment outcome studies, and an overview of major theories impacting domestic violence treatment is presented to aid in a conceptualization of the current state of the literature and to highlight the main factors influencing the treatment of domestic violence.

A Historical Perspective on Treating Domestic Violence

Even though early awareness of domestic violence was quite limited, there has been great interest in understanding and treating the problem of spouse abuse for several decades. This interest can be traced back to the anti-rape movement of the late 1960s and

early 1970s (Pleck, 1987). Historically, domestic violence awareness emerged from a community-based social movement that was strongly influenced by feminist etiology (Ehrenreich, 1985). Many community-based programs were developed primarily to shelter and serve battered women and children. These program were largely funded by the Law Enforcement Administration (Scott, Shamsid-Deen, & Black-Wade, 1990). Early leadership for the shelter movement of the 1970s was largely provided by survivors of domestic violence. Programs emphasized access for all, advocacy in police and judicial proceedings, public education, and changes in criminal codes in every U.S. state in order to expand battered women's options for safety (Flitcraft, 1996).

Early research and interventions concerned with the etiology and treatment of abusive behavior developed out of the shelter movement. Unfortunately, most early treatment programs were frequently not based on empirical data. Rather, most treatment programs were guided by a philosophy or viewpoint. Quite naturally, many of these programs were strongly influenced by feminist philosophy which have traditionally supported gender-specific group models because of concern about a power differential within the relationship that would sabotage couples-based treatment. Although research has supported the use of a group model as being most effective (Scher & Stevens, 1987; Stordeur & Stille, 1989), gender specific groups have been found to be no more effective than couple's groups (Brannen & Rubin, 1996).

It appears that most treatment protocols were pieced together from interventions that had been designed to address problems other than abuse. Despite the strong feminist influences governing the ideology of the shelter-related programs, most early group treatment protocols tended to be cognitive-behavioral in nature (see Figure 2 for a listing of treatment protocols and their orientation). Few controlled outcome studies have been conducted to test the efficacy of interventions for abusive men (Caesar & Hamberger, 1989; Edleson & Tolman, 1992; Sonkin, Martin & Walker, 1985), however, efforts to compare a variety of treatment approaches for men who batter are currently underway

(e.g., Brannen & Rubin, 1996; O'Leary, Heyman & Neidig, 1997; Rosenbaum et al, 1997). Furthermore, studies designed to understand specifically what elements of these interventions are causing change are only just now beginning to be done (e.g., Gearman & Rosenbaum, 1997; Holtzworth-Munroe & Hutchinson, 1993).

Evaluation of Treatment Effectiveness

Treatment effectiveness has generally been assessed by examining the rate of violence pre- and post-treatment with varying follow-up periods. Ending physical violence was the goal of most treatments. Generally, due to the nature of the problem, such research has not included no treatment or wait-listed treatment control groups. Instead, treatment studies have typically examined the effectiveness of one treatment format with another.

Individual, couple, and group therapy formats have all been utilized targeting men-who-batter. These formats are outlined in Figure 1. Initial treatment outcome studies compared group treatment to individual treatment. Group treatment has been promoted not only because of its economic advantage, but several earlier studies suggested that group interventions seem to work more effectively than individual therapy (Scher & Stevens, 1987; Stordeur & Stille, 1989). Because the primary goal is to change the abuser's attitude and faulty cognitions, peer acceptance, support, and validation of these changes is crucial to the treatment process (Sakai, 1991).

Early efforts by researchers to evaluate group treatment programs for batterers minimally enhanced our understanding of program effectiveness (Gondolf, 1987; O'Leary, Heyman, & Neidig, 1997; Gondolf & Foster, 1991). Assessment studies of abuser programs in the 1970's through the mid 1980's suffered from conventional methodological shortcomings such as limited outcome measures, lack of control groups, self-reported follow-up, and high drop-out rates. (Edleson & Gruszinski, 1986; Stacy & Shupe, 1984). A few uncontrolled, quasi-experimental studies have demonstrated clinically significant reduction or cessation of marital violence using a 10-15 week

cognitive-behavioral group treatment approach with batterers (Edleson, Miller, Stone & Chapman, 1985; Edleson & Brygger, 1986; Jouriles & O'Leary, 1985; Szinovacz, 1983). However, these studies relied solely on self-reports. One problem associated with self-reports is that the batterer often tends to place himself in the best light, thus underreporting the actual incidence of abuse (Edleson & Tolman, 1992). Others have utilized police data to judge treatment effectiveness (Chen et al., 1989; Dutton, 1986; Douglas & Perrin, 1987; Hawkins & Beauvais, 1985). However, as Edleson and Tolman, (1992) point out, there are also problems with this type of data in that violence is often underreported.

More recent studies of group treatment for batterers have provided some support for the effectiveness of structured, time-limited programs (Edleson & Syers, 1990, 1991; Eisikovits & Edleson, 1989; Saunders & Azar, 1989; Tolman & Bennett, 1990).

Further limitations in treatment outcome research arise from low response rates, short follow-up periods, difficulty locating subjects at follow-up, frequent failure to report pretreatment levels of physical aggression, lack of specificity of dependent measures, limited outcome measures and the absence of control groups (see Figure 2 for limitations of group treatment programs). Faulkner, Stoltenberg, Cogen, and Nolder (1992) attempt to provide one of the better examples of an outcome study incorporating useful attitudinal and behavioral outcome measures with a reasonable follow-up period (1 year). Changes in attitudes about one's partner, marital satisfaction, and severe physical abuse were maintained at the 6-month and 1-year follow-ups. Unfortunately, only 5 out of the original 34 subjects were available at the six month follow-up and a meager 3 were available at the 1 year follow-up. These numbers were so small that the changes could not be reliably measured statistically.

Chen, Bersani, Myers and Denton (1989) were the first to use a control group when evaluating a treatment program for male spouse abusers. They also had an adequate number of subjects (120 court-referred abusers and a control group of 101 non-referred

abusers). Unfortunately, there are several methodological limitations of this study. First, recidivism rates were determined using only court and police data. This allows us to make inferences about the reported success rates based upon whether subjects were caught again rather than self- or partner-reported data. Second, the first phase of treatment (four sessions) was based on a rather nontraditional "scared straight" model. The second phase of treatment (four sessions) focused on stress management and incorporated some cognitive techniques. This phase was described as "semi-structured," emphasizing the process of group interaction more than the structure of the group. This limits the generalizability of this data to the more traditionally structured psychoeducational groups which permeate the treatment outcome literature.

Recently, Brannen and Rubin (1996) improved upon existing research by comparing couples-based group interventions with gender-specific interventions using a satisfactory number of court-ordered subjects (47 couples). This quasi-experimental design used a reasonable follow-up period (6 months), useful outcome measures, and incorporated with reliable report data on recidivism (partner-report). Although there was a substantial attrition rate at the six-month follow-up (approximately 40-50%), over 90% of the victims contacted reported an absence of abuse. Brannen and Rubin (1996) found both treatments to be equally effective in reducing both physical and verbal violence while improving marital satisfaction.

O'Leary, Heyman and Neidig (1997) also compared couple's based group treatment with gender-specific groups using voluntary subjects. The results were very comparable to Brannen and Ruben (1996), demonstrating significant reductions in psychological and physical aggression for both gender-specific and couples treatments with no differential effects. Dunford (1997) presented data comparing a couples group format to a gender-specific group format. Their findings were very comparable. Both studies found that no differences in treatment outcome between group formats. This was especially interesting since Dunford (1997) reported a very sizable sample ($n>800$).

However, the absence of adequate control groups leaves the question pertaining to which components of treatment are effective and necessary. Fortunately, several studies underway are designed to elucidate what treatments are effective and why. This includes the Center for Disease Control funding a multi-site evaluation of programs for batterers that compares psychological treatments with other system interventions such as arrest and probation (Gondolf, 1997).

In addition, several recent studies explore the efficacy of different theoretical treatment approaches (Rosenbaum et al, 1997; Saunders, 1997) and come to the same general conclusions. The group treatment approach utilized does not appear to have a significant affect on the outcome. Both Saunders (1997), and Rosenbaum (1997) both compared treatment outcomes of a cognitive-behavioral approach to that of a more process-oriented psychodynamic approach and found no differences between groups based on the frequency of re-offense. Perhaps the most striking differential factor impacting treatment outcome was length of treatment. Process oriented groups were found to have lower rates of recidivism as the length of treatment increased, whereas cognitive-behavioral treatments only differed if the treatment lasted less than ten sessions.

Theoretical perspectives on spouse abuse

The prevalence and severity of domestic violence have prompted researchers to evaluate the etiology of domestic violence, focusing on explaining the behavior of the batterer (Bryant, 1994). These efforts have been guided by four major approaches: Sociocultural, relationship/systemic, individual psychopathology and skills deficit approaches. Although there are several commonalties among these approaches (see Figure 3 for commonalties and differences of treatment models), the differences are often bitterly debated. In general, differences are largely due to the perspective (sociological, familial, or psychological) used to describe the problem.

The current trend in the domestic violence literature seems to suggest that an integration of these theories is desired. In fact, Renzetti (1996) suggests that an

integrated, multidimensional theory of intimate violence is being called for because the increasing sophistication and diverse perspectives of the current literature have revealed complexities in perpetrators' and victims' motivations, interactions, and reactions on both micro and macro levels. An integration of theory could accomplish a more accurate understanding of the problem of spouse abuse. The impact theory has on both research and practice necessitates a brief review of the most prominent theories of domestic violence.

Sociocultural Theories

The core of the sociological perspective is the assumption that social structures affect people and their behavior (Gelles, 1994). The sociocultural context in which domestic violence occurs is seen as the root of the problem (Stordeur & Stille, 1989). The major social structural influences on social behavior in general are age, sex, position in the socioeconomic structure, and race and ethnicity. Hence, spouse abuse is expected to exist as a significant problem in societies where males learn that domination of females is appropriate, where male and female inequality exists in salaries for the same jobs, where men are encouraged by the media to be sexually aggressive, and where men have power in the home (O'Leary, 1994). This approach regards abuse as a behavior that is learned by men and reinforced in a patriarchal social context. In essence, battering is described as a response to social expectations.

Violence does appear to be associated with age, sex, and socioeconomic status. The rates of violence are the highest for those between the ages of 18 and 30 years (Gelles & Straus, 1988; U.S. Department of Justice, 1990). Therefore, family violence has often been conceptualized as a phenomenon of youth. Until recently, data on spouse abuse suggesting that 95% of perpetrators were men (Dobash, Dobash, Wilson & Daley, 1992) was widely accepted. However, such data have become very controversial with some family violence researchers, especially those who use a feminist perspective, arguing that females are victimized at a much higher rate than men. This perspective is supported by

data on wife abuse derived from shelters and other helping agencies (Dutton, 1995). On the other hand, Straus argues that there are far more women using violence toward men than this shelter data indicate (Gelles & Loseke, 1992; Gelles, 1994). Regardless, few would argue that men tend to be the perpetrators and women the victims.

Spouse abuse also tends to occur in all social and economic groups. This fact has often led to the conclusion that social factors, especially low income and employment, are not relevant in explaining family violence. Data from Wolfner and Gelles (1993) and Gelles and Straus (1988) indicate that while family violence does cut across social and economic groups, it does not do so evenly. The risk for all types of abuse (child abuse, spouse abuse, elder abuse) is greatest among the poor, the unemployed, and those who hold low-prestige jobs. One mechanism used to explain this phenomenon is social stress. The more stressful the environment, the greater likelihood of the occurrence of some form of family violence (Milner & Chilamkurti, 1991; Starr, 1988).

Race and ethnicity have also been the subject of a great deal of violence research. This research is also controversial. The official report data and survey data both suggest that the rate of violence toward women is higher among African-Americans and Mexican-Americans than among whites (Julian & McKenry, 1993; Goetting, 1989; Hampton, Gelles, & Harrop, 1989). However, data suggests that the higher rate of all types of violence in minority populations is linked to low income, urbanization, and youthfulness (Gelles, 1994). Official records that indicate higher levels of family violence among minority groups reflect both a reality of greater risk of abuse in these groups as well as the fact that abuse and violence in these groups is also overreported by official agencies (Hampton & Newberger, 1985).

Feminist Theory

The feminist perspective has been one of the most popular theories used to describe spouse abuse. Feminist theory focuses on the influence of gender and gender-structured relations on the institution of the family and the violence and abuse therein.

Spouse abuse is conceptualized as "male violence" and is analyzed as a means of social control of women in general (Schechter, 1982). The feminist philosophy views battering as a purposeful tool used by men to impose their will on and to dominate women rather than as an expressive problem. Violence is seen as an instrumental decision to control and dominate one's female partner. Within a sociopolitical context, power and control are seen as the fundamental issues and consequently interventions are aimed at providing education directed toward assisting both women and men about "gender politics." The ultimate goal of treatment is to eliminate all behaviors on the part of the batterer that "serve to undermine the woman's rights as an individual and as a partner "(Caesar & Hamberger, 1989, p. 8).

The conceptualization of violence as coercive control was not deduced from an abstract theoretical model, rather it grew out of practice knowledge (Yllo, 1994). The most popular control model of domestic violence was developed by the Domestic Abuse Intervention Project in Duluth, Minnesota (Pence & Paymar, 1993). The "power and control wheel" has been used across the country in batterers' groups, support groups and training groups. It provides a valuable, concise framework for seeing the interconnections between violence and other forms of coercive control (Yllo, 1994). (See Figure 4). The power and control wheel demonstrates how physically abusive behavior, in several forms (physical and sexual violence), can be used in conjunction with psychologically and emotionally abusive behavior (coercion, threats, isolation, etc.) to gain power and control over one's partner.

Feminist theory has become a dominant model for explaining violence toward women. This is largely due to the unique gender-based aspect of this model. Spouse abuse is conceptualized as a social problem and feminist theorists and practitioners strongly reinforce the need to formally address spouse abuse rather than ignore it (Gelles, 1994). It also provides an explanation and formulation to both conceptualize and end violence. Feminist theory has some inherent weaknesses as well and even strong

proponents of the feminist position agree that there are several limitations to this perspective. By applying a gender framework that provides a clear focus on violence toward women, it fails to adequately explain child abuse (which is predominantly done by women), abuse among homosexual couples, or why a relatively small number of men batter given the advantages to be gained (Dutton, 1995; Letellier, 1996). Yllo (1994) notes that though there are some answers regarding sociocultural factors associated with violence there is still very little sense of the psychological dynamics leading to the decision to use violence. Specifically, we do not know why violence appears to have a greater utility for some individuals but not others even when they appear to be in a very similar situation.

The feminist theory is often seen as a one-dimensional model of human behavior that ascribes responsibility for spouse abuse completely on gender. One of the possible reasons for this misperception is that there is not one, but rather several feminisms (Miller, 1996). In fact, many feminists have been among the most vocal critics of one-dimensional models of human behavior (Renzetti, 1996). Most feminist researchers are interested in examining how gender intersects with other status variables, including race, social class, age, and sexual orientation (Renzetti, 1996).

Relationship/Systemic Theories

In the case of family violence, the structure of the family as a social institution has a strong influence on the occurrence of family violence (Gelles, 1994). In fact, the family, with the exceptions of the military during times of war and the police, is the most violent social institution in our society (Straus et al., 1980). Therefore, relationship or systems theory underscores that violence stems from dysfunctional relationships between men and women. These theorists believe violence is caused by both partners and that the pathology lies in the relationship itself rather than either individual. The three most common relationship/systemic approaches used to describe family violence in the literature are general systems theory, family systems theory and social role theory.

General Systems Theory. A social systems approach to family violence views abusive actions as a system product rather than as the result of individual psychopathology. The system or institution (e.g., family, religion, legal system) can serve to maintain, escalate, or reduce levels of violence in families (Gelles, 1994). General systems theory describes the processes that characterize the use of familial violence and explains how violence is managed and stabilized. Straus (1973) presents seven propositions to illustrate how general systems theory relates to family violence:

1. Violence between family members has many causes and roots. Normative structures, personality traits, frustrations, and conflicts are only some.
2. Family violence is underreported, denied, and/or ignored.
3. Stereotyped family violence imagery is learned in early childhood from parents, siblings, and other models.
4. Family violence stereotypes are continually reaffirmed through ordinary social interactions and the mass media.
5. Violent acts may be positively reinforcing for perpetrators.
6. The use of violence, when contrary to family norms, creates additional conflicts over ordinary violence.
7. Persons who are labeled as violent may be encouraged to play out the violent role, either to live up to the expectations of others or to fulfill their own self-concepts as being violent.

These propositions were derived theoretically, and some have received some empirical support. The three propositions that have been well validated empirically are: violence is reinforcing (Babcock et al., 1993), violence is underreported (Sherman & Burk, 1984), and violence is reinforced through the media (e.g., Bandura, Ross & Ross, 1963).

Family Systems Theory. The family systems theory of spouse abuse grew out of the larger systems theories (Lawson, 1989). Proponents of this perspective posit that abuse occurs in the context of a dyadic relationship with violence considered one manifestation of a dysfunctional relationship. Family systems theorists argue that the marriages of abusive couples are marked by dissatisfaction of the marital relationship, decrease in communication between the dyad, a rigid adherence to sex-role stereotyping

and an increase in expectations and projection of hostility (Neidig & Friedman, 1984; Weitzman & Dreen, 1982). Cook and Frantz-Cook (1984) have identified several themes that emerge from the empirical literature on spouse abuse. These include: (1) Violence follows a cyclical pattern and is very resistant to change unless treated; (2) Violence and the spouse's response to it are, at least in part, a learned behavior; (3) Men can learn to control their violent behavior; (4) Couple's can be taught methods of reducing anger and violence in their relationships; and (5) Bringing about significant changes in these patterns requires not only working on controlling individual behavior, but also interventions that will help break the cycle that maintains the violence. Most family systems theorists would also suggest that the treatment of violence must be done in the context of the marital relationship (Cook & Franz-Cook, 1984; Deschner, 1984; Neidig & Friedman, 1984). Figure 1 outlines the Domestic Conflict Containment Program (DCCP; Neidig, 1986) which serves as a typical example of a family systems intervention (see Figure 2). The content of this approach is remarkably similar to other programs that are based in different theories. The major difference is the process by which they are presented. The DCCP is a couples group whereas the other interventions listed are designed for gender specific groups.

Systems theories have been the most strongly criticized theories with regard to their conceptualization of domestic violence because of the implicit "victim blaming" that can occur in the context of a systems perspective (Bograd, 1984; Gondolf, 1985; Stordeur & Stille, 1989; Warshaw, 1996). To conceptualize domestic violence within the context of a dysfunctional marital relationship implies that the responsibility for the violence is shared by the couple, rather than being the sole responsibility of the abusive individual. This perspective also does not adequately explain the large numbers of spouse abusers who are also generally violent. Individuals who are violent in many situations both inside and outside of the home might be better explained by a sociocultural or psychological theory.

Social Role Theory. Social role theory is the last systemic theory discussed in this paper. This theory contends that individuals occupy roles in relation to others. There are internal forces (personality, attributes) and external forces (environment, situation) that interact with one another (Handy, 1976). Role expectations are placed upon the individual by members of a role set. The role set includes family, friends, neighbors and other individuals that are encountered in daily life. Frequently, role conflict and role incompatibility occur when one has several roles (e.g., father, husband, employee, man, church usher, little league coach) dictating different behaviors and expectations (Strean, 1978). For example, if a man is in conflict with his wife, he may feel that it is important in his role as a husband to be caring for his spouse and therefore that it is important for him to resolve the conflict through compromise with minimum damage to his wife's self-esteem. However, he may also feel that his role as a man would encourage him to compete with his spouse in such a way that "winning" the argument is of utmost importance. Similarly, he may have conflicting expectations of himself that encourage both compromise and competition in the relationship. Role incompatibility occurs when expectations of each role set are different. Role strain also occurs when the number of roles one has to handle is too much (Strean, 1978). Role conflict, strain, and incompatibility are all seen as potential contributing factors in family violence.

Psychological Theories

Psychological perspectives have been gaining popularity in the domestic violence literature. Some researchers have expressed a reluctance to include individual level factors for fear that such factors could be used to inappropriately excuse violent behavior (Miller, 1996). However, several authors have begun to call for a theoretical perspective that assesses the psychological health of individual batterers while placing them in social context (e.g., Letellier, 1996; Hamberger, 1996). Psychological perspectives search for causes of violence within the individual perpetrator. These perspectives are frequently marked by research on personality traits, faulty cognitive patterns, inappropriate

reinforcement schedules, social learning, and modeling. Four approaches including individual psychopathology, cognitive-behavioral, social learning, and psychodynamic approaches will be reviewed below.

Individual Psychopathology Perspective. An alternative to the view that social institutions shape gender specific attitudes is the view that men who physically abuse their partners have a certain psychopathology that plays a very important role in their abusive behavior. In a review of the literature, Hamberger and Hastings (1988) concluded that the preponderance of physically abusive men show evidence of personality disorders according to psychological assessments such as the Millon Clinical Multiaxial Inventory (Millon, 1983). In a review of the diagnostic literature related to the topic of spouse abuse, O'Leary and Jacobson (1992) found that some abusive men may be legitimately perceived as having a DSM-IV (APA, 1994) diagnosis of Intermittent Explosive Disorder or a Sadistic Personality Disorder, but neither of these diagnoses would be applicable to most physically abusive men. Holtzworth-Munroe and Stuart (1995) found three specific subtypes of men who batter in their review of the literature - the "family only" batterer, the borderline/dysphoric batterer and the generally violent/antisocial batterer. Violent behavior within individuals in either the borderline/dysphoric or the generally violent/antisocial subtypes is described as being a consequence of their psychopathology.

O'Leary (1994) suggests that the level of physical aggression one is attempting to predict is key when trying to determine whether psychopathology or alcohol use/abuse play a role in domestic violence. At the lower levels of physical aggression, the role of psychopathology or personality traits is small but often statistically significant. This should be expected, given this level of physical aggression is very frequent in our population. As physical aggression becomes more severe, the percentage of men who have alcohol abuse problems and/or personality disorders is much higher than that found in the general population or in maritally discordant populations.

Cognitive-Behavioral Perspectives. Behavioral approaches are concerned with the development, maintenance, and alteration of behavior. Abnormal behavior is not regarded as distinct from normal behavior in terms of how it develops or is maintained (Craighead, Craighead, Kazdin & Mahoney, 1994). That is, abnormal behavior does not represent a dysfunction that has overtaken normal personality development. Rather, certain learning experiences or a failure to receive or profit from various learning experiences accounts for the maladaptive behavior. Behavioral approaches focus on three types of learning: classical conditioning, operant conditioning, and observational learning.

The evidence regarding the role of biological, cognitive, and emotional variables in causing, maintaining, and changing behaviors has necessitated modifications in the basic behavioral model (Craighead, Craighead, Kazdin & Mahoney, 1994). The cognitive-behavioral model assumes a reciprocal determinism (Bandura, 1977) between the environment and the individual. It further assumes that for each individual, the person variables are reciprocally interdependent. Ingram and Scott (1990) have provided a core definition of cognitive-behavioral therapy suggesting that it can be viewed as sets of therapeutic procedures that embody theoretical conceptualizations of change that place primary importance on cognitive process, and that procedurally target at least some therapeutic maneuvers specifically altering aspects of cognitions.

One of the best ways to see how cognitive and behavioral approaches are applied to domestic violence is by reviewing the cognitive-behavioral treatments commonly used in addressing this problem. Figure 1 outlines several treatment approaches that incorporate cognitive-behavioral techniques into them (see Figure 1). The most common treatment for men-who-batter is self-control planning. This incorporates education around the identification of internal and external cues and reinforcers that can be used to predict probable reactions and to change behaviors if necessary. Some of the components often included in this process are planning for a stressful relational conflict, confronting the situation, coping with arousal during attempts to resolve the conflict, and reflecting on

one's behavior after the conflict has been resolved (Hamberger, 1997). Cognitive restructuring with an emphasis on self-talk, thought stopping, modeling, role play, and behavioral assignments are also incorporated into cognitive-behavioral interventions for domestic violence (Eisikovits & Edleson, 1989; Hamberger, 1997; Neidig & Friedman, 1984).

Although cognitive-behavioral approaches offer systematic, empirically based methods to facilitate behavior change, this approach has received some criticism. Specifically, criticism about the value-neutral philosophy that drives the cognitive-behavioral approach has been seen as not being consistent with a profeminist orientation to intervening with partner-abusing men (Adams, 1988). Hamberger (1997) argues that although the theoretical basis of cognitive-behavioral therapy approaches may be value-neutral, clinical applications are not. He believes that clear values, consistent with feminist philosophy, can be established in emphasizing self-responsibility for self-control, respect for the autonomy and equality of others, and the cessation of abusive in all forms.

Social Learning Theory. The vast majority of intervention programs have been in some way influenced by social learning theory. Social learning theory's basic premise is that violence is a socially learned behavior and that it is self-reinforcing. There is ample research to suggest that violence is modeled and learned in the environment. Bandura and Huston (1961) provided early evidence that children readily imitate a model's behavior in the presence of the model. Bandura, Ross and Ross (1961, 1963) provided evidence that aggressive behavior can be transmitted through imitation of aggressive models in their environment. Further evidence of transmitted aggression can be found in Hotaling and Sugarman (1986), demonstration that many abusers and victims were either abused as children or were witnesses to familial violence. Several authors (Geffner, Mantooth, Franks & Rao, 1989; Gelles & Cornell, 1985; Hershorn & Rosenbaum, 1985) suggest that social learning explains how violence perpetuates itself through intergenerational transmission of violence.

From a social learning perspective, males are viewed as biologically predisposed to aggressive behavior because of their greater musculature compared to females (Lawson, 1989). Observational learning is believed to account for the acquisition of the actual battering behavior, however, it must have some functional value and thus be rewarded in order to be maintained. There are built-in instant rewards for battering: Men "win" arguments that may have been going badly; they act out and control the situation the way they think real men are supposed to; and they experience a physiological stress release that is intrinsically rewarding.

Social learning theory has advantages over other theories because it accounts for individual variations in behavior and it relates wife assault to a large body of general studies on aggression (Dutton, 1995). However, there are some limitations. First, according to this theory, violence is always triggered by an external event. However, it is believed that some men create some of the events that trigger their violence (Dutton, 1995). Finally, observational learning does not lead to violence in the linear fashion. Rather, many experts would agree that social learning is a key part in a complex, multidimensional problem (Adams, 1996).

Psychodynamic Approaches. Perhaps the least popular psychological approach to domestic violence is the psychodynamic approach. Though, as noted earlier, this approach has received increased attention and has been found to be comparatively successful to cognitive-behavioral approaches (Rosenbaum et al, 1997; Saunders, 1997). Insight-oriented approaches frequently focus on addressing childhood trauma and the shame that accompanies it. Figure 1 outlines an example of a dynamic treatment approach (see Figure 1). The average insight-oriented approach lasts an average of 18-24 months whereas other approaches last anywhere from 5 to 24 weeks. Adams (1988) examined several dynamic clinical approaches to battering behavior and concluded that there is considerable merit to helping the abusive man become more aware of how he has been affected by past experiences so that he can respond more appropriately to present

relationships. Pressman and Sheps (1994) believe that insight-oriented group psychotherapy with men who batter can help these men make connections between childhood abuse and damaged self-esteem, current attitudes and current functioning in their relationships with their wives and children.

Proponents of a psychodynamic approach emphasize key psychoanalytic concepts that are thought to be particularly useful with this population. For example, Scalia (1994) concludes that the batterer's individual defense mechanisms and "unconscious collusion" by therapist and client to mistakenly perceive treatment as successful are two vital aspects that are often overlooked in more conventional treatment programs. Scalia (1994) also calls into question the use of confrontation and its frequent misuse as being coercive rather than constructive.

There are several criticisms of a psychodynamic approach to treatment of violent men. First, insight does not end violence. Therefore, other interventions that directly address stopping violent behavior must be added to an insight-oriented approach. Second, a majority of batterers are not amenable to long-term, insight-oriented psychotherapy (Sonkin, 1995). Many men think therapy is for crazy or weak individuals. Edleson (1992) emphasizes the need for abusive men to see themselves as not mentally disturbed patients, but rather as individuals who have the capacity to learn and change their behaviors. A final criticism of insight-oriented group psychotherapy is that such an approach is long and costly. This frustrates men who are more result/action oriented (Sonkin, 1995) and is likely not to be covered by insurance.

Social Skills Approaches

Social skills theory has recently gained popularity as a framework to describe domestic violence. Interestingly, social-skills training continues to be one of the more commonly prescribed treatments for abusive behavior whether it be rape, pedophilia, or spouse abuse (Abel, Blanchard, & Becker, 1978; Barlow, Abel, Blanchard, Bristow, & Young, 1977; Crawford & Allen, 1979; Holtzworth-Munroe & Hutchinson, 1993;

Holtzworth-Munroe, 1992; Whitman & Quinsey, 1981). Social skills training in the area of spouse abuse typically consists of teaching communication skills and assertiveness training. In addition, individuals are taught to detach from the environment (using time-outs) under circumstances (e.g., experiencing overwhelming anger) when decision making might be impaired (Pence & Paymar, 1993; Weeks, 1993). Nevertheless, reviews of the literature (Earls & Quinsey, 1985; Hollon & Trower, 1986; Stermac, Segal, & Gillis, 1989) have concluded that, social-skills training is not based on a solid foundation of coherent theory and that it does not consist of explicit and replicable techniques. It is also believed that social skills theory is plagued by serious conceptual, methodological, and measurement problems and that it is not yet supported by compelling evidence of treatment efficacy (McFall, 1982).

The popular use of social-skills training for abusive behavior seems to be based largely on the intuitive appeal of the idea, clinical experience, and on the implicit faith of the proponents. Figure 1 describes the components of some of the most popular and up-to-date domestic violence treatment protocols (see Figure 1). Social skills training, in the form of communication and assertiveness training, is in virtually all of these protocols. Yet, very little empirical evidence has been conducted in order to document the existence of either general or specific social skills deficits in this population. McFall (1989) notes that research to date is inconclusive and insufficient. In response, McFall (1989) presents an information processing model of social skills and outlines a new direction for future research on social-skills training with abusive individuals in an effort to overcome many of the conceptual and methodological problems that have plagued previous research.

McFall's Information Processing Model of Social Skills. The social information-processing model is a two-tiered model in which the constructs of social competence and social skills are hierarchically related, rather than being equal. McFall (1982) believes that *social competence* is the social-judgment process by which an "individual's performance of a particular task, in a particular setting, at a particular time, is evaluated either by that

individual or by significant others to be adequate, relative to the judge's implicit and explicit standards and values" (p. 273). McFall (1982) defines competence in the following ways. 1) Competence is not a trait of the person but rather is described as being specific to each person's task performance as perceived by themselves or someone else; 2) Competence is not global -- it is task specific. Persons are judged to be competent on particular tasks rather than given a global rating; and 3) Competence is not absolute, different people may evaluate the same task performance differently because they apply different criteria or because their judgments are shaped by different operational definitions and biases (Kahneman, Slovic, & Tversky, 1982). The construct of *social skills* is subordinate to social competence. McFall (1982) refers to social skills as "the underlying component processes that enable an individual to perform a task in a manner that has been (or will be) judged to be competent" (p. 273). Therefore, the understanding of social skills makes sense only within the framework of a specific definition of social competence.

McFall (1982) sets out these component processes in a sequential, three-stage system where the individual transforms incoming stimulus information (situational task demands) into the observable behaviors that are then evaluated as competent or incompetent. This model is depicted in Figure 5 (see Figure 5). Each step in this sequence must be adequately carried out if behavioral performance is to be deemed competent. The three stages of social-information processing: decoding information, making decisions based on your perceptions, and enacting the decided behavioral response are defined as follows:

1. *Decoding Skills.* These are the information acquisition processes involved in the accurate reception, perception, and interpretation of incoming sensory information. For example, if a man never receives a woman's social cues, his social behavior toward that woman is more likely to be inappropriate and to be judged incompetent. Similarly, if the man receives the woman's cues, but misperceives or misinterprets them, his behavior

will be tailored to the wrong situation most likely resulting in his behavior being judged incompetent.

2. *Decision Skills.* Decision skills are the central processes by which the situation is transformed into the behavioral program to be carried out in the next stage. The specific steps in this stage are: 1) generating response options; 2) matching these to task demands; 3) selecting the best option; 4) searching for that option in the behavioral repertoire; and 5) evaluating the subjective utility of that option's likely outcomes relative to the likely outcomes of other options. If the person encounters a problem at any step, the decision process is recycled until it generates a behavioral program that the person considers appropriate, available, and acceptable. Thus, a man who has decoded his partner's social cues accurately still may perform incompetently as a result of inept decision making. This inept decision making may take him in several different directions. He may not know what response is best for a given situation (e.g., he is confused by his partner's behavior and does not know what to do). If he knows what to do, he may not have the preferred response in his repertoire (e.g., he is not sure how to comfort his partner when she is upset or angry). And even if he knows what to do and how to do it, he still might decide against taking the preferred action if he considers it too risky or costly (e.g., he is afraid to confront her behavior because she might get mad and leave him). Alternatively, a man might decide on an action that others consider incompetent (e.g., coerces the woman sexually), even though he correctly reads the situation (e.g., he knows she rejects his sexual advances), because he believes that this action will get him what he wants and because he considers the potential gains to be worth the risks.

3. *Enactment Skills.* These are the processes involved in carrying out the behavioral program selected in the preceding stage. The person must execute the program smoothly, monitor its impact on the environment, and make whatever mid-course adjustments are necessary to achieve the intended impact. Thus, even if a man has decoded a woman's social cues accurately and has selected an optimal course of action, he still may be judged

incompetent if he either fails to execute the program well or fails to adjust his behavior to environmental feedback.

The key assumptions of the SIP model are listed below (McFall, 1989).

1. Skillful processing at each stage is necessary, but not sufficient, for competent task performance.
2. Skills are task- and situation-specific, suggesting that certain types of marital situations will be problematic for violent men in general.
3. Social skills and social competence are hierarchically related, rather than synonymous.
4. The focus is on the processes that lead to observable task performance, as opposed to placing persons into general categories.
5. The information-processing stages described above are sequential and this has implications for the choice of optimal research strategies.
6. The steps proposed in this model are often carried out in an "automatic" fashion.
7. Transitory factors (e.g., alcohol ingestion, anger, social contagion, or sexual arousal) may influence this decision process, particularly the appraisal of risk.

The social information processing model is one of the most explicit models of domestic violence. It offers an empirical framework to guide research and has already generated research in domestic violence. However, two aspects of the SIP model remain untested with this population: the decision making phase and the enactment phase.

McFall's model lends itself well to techniques of decision making analysis utilized in psychology and economics. In particular, the utility evaluation component of the decision making phase can be tested using decision making technology. Therefore, decision making technology will be incorporated into this research design because it provides the theoretical and technical components needed to extend decision making research.

Decision Analysis

Decision making is conceptualized as an adaptive process that can be partitioned into phases or stages (e.g., Kahneman & Tversky, 1979; McFall, 1982). Such phases include generating alternatives, predicting the consequences of actions, searching one's behavioral repertoire, testing whether an alternative satisfies one or more levels of

acceptance (filtering), and the selecting one alternative out of a perceived set of alternatives. Future research in the area of abusive behavior may benefit from the conceptualization of violence as a decision problem for several reasons. First, adopting a cognitive science approach may provide a base to develop broad, integrative theories. This is an vast improvement over the anecdotal information currently supporting social skills interventions.

Second, this approach fosters an explorative research style that may help develop and test hypotheses around a conceptual model. Previous attempts to research decision making skills have been done at a global level, with all-purpose "problem-solving" measures. By focusing more narrowly on assessing an individual's profile of skills across a limited number of well-defined tasks, specific hypothesis testing may then follow from an empirically developed model.

Lastly, this model lends the well-developed tools and techniques of decision analysis to empirically examine individuals' cognitions and behaviors. Technology exists to examine behavior or alternative selection and attribute importance in decision making. Specifically, multi-attribute utility technology (MAUT) provides methods for examining decision making involving multiple alternatives and multiple attributes. This technology can be applied to the decision making processes associated with spouse abuse.

In summary, application of a cognitive science methodology would surpass shortcomings of existing models of spouse abuse by 1) providing an extension of McFall's SIP model for abusive behavior; 2) fostering an explorative research style in addition to the generation of specific testable hypotheses; and 3) lending a methodology that defines variables that have face validity and perhaps clinical utility. One approach to decision making analysis, multi-attribute utility technology, is described next.

Multi-Attribute Utility Technology (MAUT)

Multi-Attribute Utility Technology (MAUT) offers an explicit methodology to assess the decision process (for a review see Edwards & Newman,1982; Edwards,1971;

von Winterfeldt & Edwards,1986). MAUT is a theory of decision making that is derived from certain axioms or fundamental principles (von Winterfeldt & Edwards,1986). The technology of MAUT provides a means to combine multiple alternatives and multiple attributes to describe the decision process and decision structure. Decision outcomes are suggested based on dominance structure where one alternative can be seen as dominant over the others.

There are several versions of MAUT (e.g., Edwards, 1971; Keeney, 1972; Raffia, 1969). This paper uses Simple Multi-attribute Technology (SMART) (Edwards, 1971; von Winterfeldt & Edwards, 1986). Any decision situation involves a number of behavioral alternatives (behaviors). The impact of each behavior can be subjectively defined on various outcomes or situational attributes (e.g., self-image, feel in control). The values of each attribute are referred to as aspects (e.g., for self image: feel "good" or feel "bad"). Attributes are scaled in terms of their desirable and undesirable aspects and these aspects are judged to be more or less attractive by the decision maker.

Multi-attribute-utility measurement presumes that each behavior impacts or has an affect on each attribute dimension. Locating each behavior on each attribute dimension may consist of experimentation, naturalistic observation, judgment, or some combination of these. Generally judgments produce these numbers. These location measures are then combined by an aggregation rule to compute a subjective utility for each behavior. This rule is most often a weighted average. The weights in the weighted average are numbers describing the importance of each attribute. After determining the subjective utility aggregations, the behavior(s) with the highest aggregate values is/are said to dominate. Presumably, the best choices dominate. These are the behaviors that enable individuals to maximize their satisfaction given the entire set of attributes.

Often one behavior may easily dominate. Difficulties arise when, within a set of behaviors, "attractiveness" on one attribute results in significantly less attractiveness on another key attribute. During marital conflict an individual might face such a dilemma.

Choosing behavior consistent with the goal of maintaining marital intimacy may suggest avoiding acting physically aggressively at home. The ability to be in control, on the other hand, may suggest acting. Figure 6 presents a sample behavior by attribute matrix for a sample situation (see Figure 6). The attribute matrix in Figure 6 has behaviors listed in the first column and attributes listed across the top. The bottom row shows the importance weights for each attribute. Aggregate scores (subjective utilities) are listed on the last column. In this example, the attribute "compromise with your spouse" dominates because it has the highest subjective utility. This example will be used to describe the six steps of MAUT below.

Step 1: Structuring the problem. Crucial to MAUT technology is structuring the decision problem. McFall has provided a meaningful structure of the decision making process. Similarly, high risk situations associated with abusive behavior have been empirically identified. In the case of Joe, we are interested in an examination of the decision process an abuser may undergo in a high-risk conflict situation. The purpose of this examination is to understand why Joe would choose to be violent when he wants to stay happily married.

Step 2: Eliciting Behaviors. The next two steps involve the development of an behavior by attribute matrix such as the one shown in Figure 6. First, behaviors specific to the problem situation are identified. As previously indicated behaviors are possible actions. Consider again the example of Joe. He may consider the following 8 behaviors: (1) Be physically aggressive; (2) Do nothing; (3) Compromise with his spouse; (4) Beg and plead with his spouse; (5) Rethink his position and talk to his wife; (6) Threaten or intimidate his spouse; (7) Act aggressively toward property or pets (8) Be verbally aggressive.

Step 3: Eliciting Attributes. Next situationally relevant attributes are defined. Attributes are defined as "abstractions that help organize and guide preferences.... most often expressed as statements of desired states, positive intentions or preferred directions"

(von Winterfeldt & Edwards, 1986, p.38). The important attributes for Joe might include ability to feel in control, his self-image, his wife's self-image, marital harmony, quick conflict resolution, other's opinions of Joe and having the problem "fixed.".

In addition to choosing meaningful attributes, monotonic scales for the attributes must be defined. It is important to note that attributes can be considered continuous variables such that certain aspects of the attributes will be more or less attractive. For example, one may anchor the "self-image continuum" with "feels bad about himself" and "feels good about himself." This continuum provides a scale on which behaviors can be rated.

Step 4: Rank the attributes in order of importance. Next the attributes are ranked in order of importance relative to each other. Relative importance ratings are also made to quantify the relative weight each attribute carries in the overall aggregate determination. For example, a subject would be asked to rank by importance the following attributes: ability to feel in control, his self-image, his wife's self-image, marital harmony, quick conflict resolution, other's opinions of him, and having the problem "fixed." He would then assign a numeric rating to the least important dimension. Next, he would need to compare his rating with the next least-important dimension. How much more important (if at all) is the next attribute compared to the least important? He would assign the second attribute a number that reflects this ratio. Each subject would then need to continue down the list, checking each set of implied ratios as each new judgment is made. Later, weights in the sample are normalized to equal 1.

Step 5: Behavior by Attribute Ratings. Next, the attractiveness of each behavior on each of the seven attribute dimensions is measured. These ratings are illustrated for behavior one (physical aggression) in the second row of the sample matrix in Figure 6. The numeric ratings for the behavior on each attribute are on a 0-to-100 scale. As shown in the matrix across the columns, these ratings are made for each of the 8 behaviors.

Step 6: Calculating Aggregates. The last column of the matrix in Figure 6 shows aggregate utility scores for each of the 8 behaviors. A weighted average is used to compute the aggregates by multiplying each attribute importance weight by each specific behavior by attribute rating and summing. Each attribute importance weight is multiplied by its respective attribute x behavior rating and is then summed. Going across the columns of the sample matrix, the aggregate score, $(A_1 \times A_1)(wt_1) + (A_2 \times A_1)(wt_2) \ldots (A_7 \times A_1)(wt_7)$. The option(s) with the largest aggregate score dominates and therefore is the "best" choice.

Consider, again, the example in Figure 6. The highest aggregate scores occur for behaviors 1 and 6. This example suggests that the attractiveness of being physically aggressive or compromising are highest. The aggregate scores for the other behaviors are less. This type of pattern would have implications for understanding the performance of violence in certain conflict situations. Such results would suggest violent behavior is functional for some men in that it maximizes utility. Secondly, these results would suggest that these higher utility behaviors are more functional than the less controlling behaviors. Therefore, these behaviors are more likely to be performed than the lower scoring behaviors. A more fine grain examination of the decision making components in abusive men would enable us to say what factors contributed to each of the aggregate scores and thereby provide some insight into what influences their information processing in conflictual relational situations.

Summary

This paper attempts to expand a SIP model for spouse abuse using MAUT a decision making technique. A decision making paradigm was applied to relational conflict situations with two main objectives. First, specific components of the SIP model were examined to predict the occurrence of aggressive behaviors. Second, when aggressive behavior occurred, utilities were examined to understand why it occurred.

SPECIFIC AIMS AND HYPOTHESES

Relevance of Study

Numerous treatment programs from differing theoretical orientations employ social skills training. The decision making phase of the SIP model provides a well delineated framework to generate testable hypotheses regarding the existence of such skills deficits. To date there is a paucity of empirical research supporting skills deficits at any point in the SIP model, including the decision-making phase. Few empirical studies exist that have tested social skills of men-who-batter at any juncture and this is the first application of a more sophisticated decision making technology to understand abusive behavior.

This study applied behavioral decision theory to the area of spouse abuse. Specifically, the decision making portion McFall's Social Information Processing (SIP) model was examined across three groups of men: men-who-batter (abusive group), maritally distressed but nonabusive men (distressed group), and maritally nondistressed, nonabusive men (control group) to address the two primary hypotheses.

Hypotheses

1. *Is the utility of abusive behavior functional for abusive men?*

Abusive men may engage in abusive behavior because they benefit from such behavior. That is, such behavior is functional. By operationalizing the value of a behavior as a Subjective Expected Utility (SEU), the relative value of behavior can be examined.

1a. It was expected that for abusers, SEUs would be higher for abusive behaviors. That is, abusive men would experience more benefit from behaving violently than their maritally distressed or control counterparts.

(i) This effect was expected to be most pronounced for angry abusive men. This difference was not expected to be the result of marital distress and consequently the maritally distressed group was not expected to differ from the control group.

(ii) The utility of behavior was expected to change as the result of situational variables. Specifically, high-risk situations were expected to increase the SEUs of abusive behaviors for the abusive group. The type of situation (high-risk & control) was not expected to change the SEUs of verbally and physically aggressive behaviors for either the distressed or control groups.

(iii) Given that abusive behavior had higher SEUs for abusers, it was expected that an examination of the components of the utilities would explain why the utilities differed. Specifically, control was expected to significantly explain the higher SEUs that abusive behavior had for the abusive group.

1b. Abusive men may not engage in healthy behavior because they do not perceive that they benefit from such behavior.

(i). It was expected that for abusers, SEUs would be lower for healthy behaviors when compared to other groups. That is, abusive men would experience less benefit from behaving in a healthy manner than their maritally distressed or control counterparts.

(ii). It was also expected for abusers, SEUs of healthy behavior would be lower than abusive behaviors in certain contexts. Specifically, abusers who were assigned to the anger condition were expected to rate the SEUs of healthy behaviors lower than any other group. The type of situation (high-risk & control) was also expected to impact the SEUs of healthy behaviors for the abusive group. The high-risk situation was expected to lower the SEUs of healthy behaviors for the abusive group. The relative SEUs were expected to explain the performance of abusive behaviors.

2. *Does the perceived ability to engage in healthy behaviors differ by group?* The repertoire search component of the SIP represents individuals' perceptions of their own abilities to execute appropriate behaviors. This was measured by requiring subjects to rate their personal ability to carry out each behavior on a numeric scale ranging from 0 to 100. It was predicted that the abusive group would rate their ability to execute appropriate or competent behaviors (e.g., compromise) significantly lower than the control

group but no differently than the maritally distressed group. Conversely, it is predicted that the abusive group would rate their ability to perform aggressive outcomes significantly higher than the distressed and control groups during the high-risk vignette, but would provide similar ratings for the control vignette.

RESEARCH DESIGN AND METHODOLOGY

Multi-Attribute Utility Technology (MAUT) was applied to study decision making in marital conflict situations. This study consisted of two phases. During phase one, semi-structured interviews were used to construct the situation-relevant Decision-Making Task (DMT). Interviews were conducted with 6 active-duty and civilian United States Air Force mental health professionals working in the area of family violence in order to collect situation-specific behaviors and attributes.

Phase two involved examining decision making among 32 abusive men, 32 maritally distressed nonviolent men, and 32 nondistressed, nonviolent men who had been married for a minimum of one year. Subjects completed seven self-report measures and the DMT.

Phase One

Methods

Subjects. Subjects were 6 licensed clinical social workers and/or licensed clinical psychologists currently employed at the Family Advocacy Program, Andrews Air Force Base, Maryland. All subjects had extensive experience working with family violence.

Procedure. Specific behaviors and attributes were developed during this phase. The attributes and behaviors were enumerated by conducting either one-on-one interviews and/or group interviews with follow-up questionnaires (Appendix A).

Previous research has identified several high-risk situations that are especially problematic for violent couples (Holtzworth-Munroe & Hutchinson, 1993). These situations are characterized by specific environmental and emotional variables that include

rejection, jealousy and potential public embarrassment (Dutton & Browning, 1988; Holtzworth-Munroe & Anglin, 1991; Holtzworth-Munroe & Hutchinson, 1993). These vignettes were used throughout the study (Dutton & Browning, 1988; Holtzworth-Munroe & Anglin, 1991).

Behavior elicitation. One of the two vignettes was read to each subject by the experimenter. Subjects were asked to list all the ways that spouse abusers with whom they have worked clinically might respond to this situation. Participants were encouraged to list multiple behaviors.

Attribute Elicitation. After eliciting behaviors, each subject was asked to describe what values, goals, outcomes, and expectations might be important in helping clients decide what to do in such situations.

Analyses. Frequency ratings for the behaviors were determined. Behaviors reported by at least 80 percent of all subjects were included in the decision task. Behaviors were examined for six individuals experienced in intervening with men-who-batter (Maj. Nancy Winegartner, USAF; Mary Campise, LCSW; Bob Shulte, LCSW, Lt. Paul Moitoso, USAF; Cynthia Spells, LCSW; and Maj. Rick Campise, USAF). Similar behaviors were condensed.

Attributes. A similar procedure was conducted with the attributes. Attributes reported by at least 80 percent of the subjects were included. Attributes were reviewed along with their respective scaling. The attributes were checked for independence from other attributes. This was done by conducting sample ratings. Generally, trouble in decision analysis follows from two sources: 1) difficulty rating an attribute because it is seen as dependent on the state of another attribute; 2) difficulty rating an attribute because it has not been operationalized correctly and reflects two attributes. Attributes that were not independent were re-worked. This generally involved forming another attribute.

Summary. The output of phase one included 1) a list of 8 behaviors and 2) a list of 7 attributes and (3) the DMT (Appendix B). The 8 behaviors and 7 attributes are listed on the sample matrix (Figure 6)

Phase Two

Methods

Subjects. Subjects included a group of 32 abusive, maritally distressed men (abusive group), 32 maritally distressed, nonabusive men (distressed group), and 32 nondistressed, nonabusive men (control group). Violent subjects were recruited from Prince George's County Family Crisis Center (PGCFCC) as well as the family advocacy programs at Bolling AFB, and Anacostia Naval Station. Abusive subjects were also recruited through newspaper advertisements. Recruitment through PGCFCC and the family advocacy programs occurred by program staff who asked potential subjects if they would be interested in participating in this study. If potential subjects expressed interest, they submitted their phone number to the program staff so that the principal investigator could contact them. Control subjects (both maritally distressed/nonviolent and nondistressed/nonviolent) for this study were obtained through recruitment from local newspaper advertisements. Spouses of all subjects were contacted by the experimenter to request participation if the subject consented to it. All subjects were paid $15 for participation.

Inclusion/Exclusion Criteria. All subjects were legally married and residing with their spouse. Subjects in the three groups were matched for age, race, and education to ensure no differences existed on these three variables. To be eligible for entry into the abusive group in this study, the individual must have engaged in some form of physically abusive behavior toward their spouse in the last three months. The abusive group did not include individuals who engaged only in verbal aggression with their spouse. This was measured in two ways. First, abusive subjects had to be enrolled in the early stages of a treatment program due to their involvement in at least one physically abusive incident with

their spouse. Second, scores of 1 or more on any physically abusive item (e.g., slapped my partner, hit my partner) on the Modified Conflict Tactics Scale (MCTS; Neidig, 1986) were required for admission into the "abusive" group. Subjects were required to score a "0" on all physically abusive items to be eligible for entry into the distressed group or the control group.

Two measures were used to differentiate between the maritally distressed and nondistressed groups to insure accuracy. First, cutoff scores from the McMaster Family Assessment Devise-III (FAD-III) were used to determine level of marital distress. Based upon norms published by Epstein, Baldwin, and Bishop (1983), scores of 24 or more were considered "distressed." Scores of 23 or less were considered "non-distressed." Similarly, cutoff scores were used on the Dyadic Adjustment Scale (DAS) to determine level of marital distress. Based upon norms published by Spanier (1976), scores of 100 or more were considered "non-distressed." Scores of 95 or less were considered "distressed."

Transient factors such as depression, anger, and alcohol use can mediate the decision making process (McFall, 1989). Therefore, subjects were screened accordingly. The Beck Depression Inventory (BDI; Beck, Rush, Shaw & Emery, 1979) was used to measure depression. The State Anger Scale of the State/Trait Anger Scale (STAS; Speilberger et al., 1983) was used to measure state anger. Finally, the Michigan Alcohol Screening Test (MAST; Seltzer, 1971) was used to assess potential alcohol problems that may influence the decision making process.

Instrumentation. Seven self-report instruments were used to test the hypotheses of this study, to differentiate between comparison groups, or include/exclude potential subjects. These include the Modified Conflict Tactics Scale (Neidig, 1986), Dyadic Adjustment Scale (Spanier, 1976), Michigan Alcohol Screening Test (Seltzer, Vinokur, & van Rooijen, 1975), McMaster Family Assessment Device, Version 3 (Epstein, Baldwin, & Bishop, 1983), the Beck Depression Inventory (Beck, Rush, Shaw & Emery, 1979),

State/trait Anger Scale (Spielberger, Jacobs, Russell, & Crane, 1983) and the Eysenck Impulsivity Questionnaire (Eysenck & Eysenck, 1978). The measures selected were chosen due to the ease of their administration and scoring as well as the fact that each is psychometrically sound. These instruments are described below and a copies are provided in Appendix C.

Two measures were constructed specifically for this study. First, a basic information questionnaire was designed to gather pertinent demographic information such as age, educational status, rank, and race. Second, the decision making task was constructed with a series of vignettes as well as paper-and-pencil measures designed to isolate and assess the separate components of the hypothesized decision-making process.

Modified Conflict Tactics Scale (MCTS). The MCTS (Neidig, 1986) is a 24 item instrument designed to assess physical violence, severe physical aggression, and verbal aggression. Its primary use in this study was to differentiate between the violent and nonviolent groups. The MCTS is a modified version of the Conflict Tactics Scale (CTS; Straus, 1979). Versions of the CTS are currently the most commonly cited measures of spouse abuse in the literature (Gottman et al., 1995). The CTS assesses the frequency of various conflict resolution tactics in the relationship. Spouses are asked to rate their own and their partner's behavior for each question. The introduction of the CTS asks respondents to think of situations in the past six months. Respondents are asked to indicate how often both they and their spouse engaged in each of several aggressive acts. Each item is rated on a scale from 1 (never) to 7 (more than 20 times) based upon how often the event has occurred over a specified time period. Neidig (1986) added 4 questions to the original CTS that assess other common behaviors displayed during interpartner conflict. Neidig (1986) also reduced the rating period to address conflict tactics used to the previous 14 weeks. This was done because it is sometimes impractical to use a six month rating period for experimental research that typically lasts for a shorter period of time (e.g., 10 to 15 weeks). The items start with those low in coerciveness and

gradually become more coercive and aggressive. The CTS yields three subscales that address physical and verbal aggression tactics utilized by couples in resolving conflict. These include the Verbal aggression (heated verbal exchange) subscale, Physical Aggression (threw something at the other one, pushed, grabbed, or shoved the other one, slapped or spanked) subscale, and Severe Physical Aggression (hitting, kicking, biting, beating up, using or threatening to use a weapon) subscale.

The internal consistency reliability of the CTS was computed based upon a sample of 385 respondents (Straus, 1979). Alpha coefficients based upon couples scores are high for the Verbal Aggression (.80 for husband to wife and .79 for wife to husband, respectively) and Violence Scale (.83 for husband to wife and .82 for wife to husband, respectively). No estimates of test-retest reliability have been reported.

Construct validity of the CTS was established using a factor analysis (Straus, 1979). Three factors as identified above (Factor I, Violence; Factor II, Verbal Aggression; and Factor IV, Reasoning) emerged after this factor analysis. In addition, Factor III, Severe Physical Aggression, shows that the core of this factor is on the last two items of the CTS that relate to use of a knife or a gun. Straus (1979) states "the fact that they refer to potentially lethal acts, and the fact that the loadings on this factor decrease rapidly as the seriousness of the violence diminishes, suggests that Factor III represents the Wife-beating subscore" (pp. 81-82).

Evidence of concurrent validity is reported by Bulcroft and Straus (1975), who assessed the rates of violence as reported by both couples and students concerning conflict tactics used by the parents within the previous year. The rates reported by both parents and students were almost identical with the violence rates reported by a nationally representative sample of spouses (Straus, 1974). Straus (1979) states that face and content validity of the CT scales are self-evident since they all describe acts of actual physical force being used by one family member on another.

Beck Depression Inventory (BDI). The BDI (Beck, Rush, Shaw, & Emery, 1979) is a 21-item questionnaire designed to assess the severity of depressive symptoms in adolescents and adults. The clinical observations and patient descriptions are systematically consolidated into 21 symptoms and attitudes that are rated on a 4-point scale ranging from 0 - 3 in terms of severity.

Four levels of depression that are based upon BDI total scores are used. The cut-off scores for each classification are as follows: minimal (0-9), mild (10-16), moderate (17-29), and severe (30-63). With normal populations, BDI total scores greater than 15 may detect possible depression, although clinical interviews are crucial for confirmation (Oliver & Simmons, 1984).

The original BDI was developed by Beck, Ward, Mendelson, Mock and Erlbaugh (1961). The revised BDI was developed using data from six normative-outpatient samples in which the psychometric properties of the BDI were obtained (Beck, Rush, Shaw, & Emery, 1979). Samples included mixed DSM-II diagnoses, single episode Major Depressive Disorders, recurrent-episode Major Depressive Disorders, Dysthymic Disorders, alcoholics, and heroin addicts. Reliability estimates based upon Cronbach's coefficient alpha for mixed, single-episode major depression, recurrent-episode major depression, dysthymic, alcoholic, and heroin-addicted subjects are .86, .80, .86, .79, .90, and .88 respectively (Beck & Steer, 1993). These estimates are consistent with mean coefficient alphas reported by Beck, Steer, and Garbin (1988) of .86 for the BDI in meta-analysis with nine psychiatric samples, and .81 for 15 nonpsychiatric samples. Therefore the revised BDI has high internal consistency in both clinical and nonclinical populations.

Beck, Steer, and Garbin (1988) reviewed 10 studies that addressed pretest and posttest administrations of the BDI. They reported that the range of Pearson product-moment correlations between pretests and posttests for varying time intervals of psychiatric populations to range from .48 to .86., whereas test-retest correlations for nine studies of nonpsychiatric patients ranges from .60 to .90. Lightfoot and Oliver (1985)

reported a test-retest correlation of .90 over a two-week interval with 204 undergraduates suggesting that scores are stable over time with nonpatients. It should be noted, however, that test-retest studies with specific time periods may be irrelevant for many individuals due to the dynamic nature of depression.

There have been numerous studies on the construct validity of the BDI with different variables (Beck, Steer, & Garbin, 1988). The BDI is significantly related to the depression-dejection scale of the Symptom Checklist-90 Revised (Derogatis, 1979) and the Depression Scale of the Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1943) beyond the .001 level, in the mixed diagnostic sample of 248 outpatients. Beck, Steer, and Garbin's (1988) meta-analysis found a mean correlation of .72 between clinical ratings of depression and the BDI for psychiatric patients and a mean correlation of .60 between clinical ratings of depression and BDI scores for nonpsychiatric patients suggesting good concurrent validity.

Dyadic Adjustment Scale (DAS). The DAS is a 32-item instrument designed to assess the quality of relationships as perceived by married or cohabiting couples. This instrument measures several aspects of dyadic adjustment. Total scores can be used as a general measure of satisfaction in intimate relationships. Spanier (1976) also completed a factor analysis which indicated that the instrument measures four separate aspects of the relationship: dyadic satisfaction (DS), dyadic cohesion (DCoh), dyadic consensus (DCon) and affectional expression (AE).

Spanier (1976) developed the DAS with a sample of married (n = 218) and divorced persons (n = 94). The average age of the married subjects was 35.1 years, while the divorced sample was slightly younger, 30.4 years. The married sample had been married an average of 13.2 years while the average length of the marriages for the divorced sample was 8.5 years. The mean score on the total DAS was 114.8 with a standard deviation of 17.8 for the married sample. The mean for the divorced sample was 70.7 with a standard deviation of 23.8.

Spanier (1976) reports that as a total score, the DAS has excellent internal consistency, with an alpha of .96. The subscales range in internal consistency from good (AE = .73; DCoh = .81) to excellent (DS = .94; DCon = .90). Spanier (1976) reported that the DAS has shown known-groups validity by discriminating between married and divorced couples on each item. In this same study, the DAS correlated with the Locke-Wallace Marital Adjustment Scale (Locke & Wallace, 1959) that indicates concurrent validity.

McMaster Family Assessment Devise (FAD-III). The FAD-III is a 60-item questionnaire designed to evaluate family functioning according to the McMaster Model. This model describes structural, occupational, and transactional properties of families and identifies six dimensions of family functioning: problem solving, communication, roles, affective responsiveness, affective involvement, and behavior control (Epstein, Baldwin, & Bishop, 1983). Accordingly, the FAD-III consists of six subscales to measure each of these dimensions plus a seventh subscale dealing with general functioning.

The FAD-III was developed on the basis of responses of 503 individuals of whom 294 came from a group of 112 families (Epstein, Baldwin, & Bishop, 1983). The bulk (93) of these families had one member who was an inpatient in an adult psychiatric hospital. The remaining 209 individuals in the sample were students in an introductory psychology course. No other demographic data were presented.

The original studies were based on the first version of the FAD which was a 53-item measure. Since that time, seven items have been added that are reported to increase reliability of the subscales to which they were added. The current version of the scale (FAD-III) has 60 items. Each item is scored on a 1 to 4 basis using the following key: Strongly Agree = 1, Agree = 2, Disagree = 3, Strongly Disagree = 4. Items describing unhealthy functioning are reverse-scored, therefore, lower scores indicate healthier functioning. Scored responses to the items are averaged to provide seven scale scores, each having a possible range from 1.0 (healthy) to 4.0 (unhealthy).

The FAD-III demonstrates fairly good internal consistency, with alphas for the subscales ranging from .72 to .92 (Epstein et al., 1983). Internal consistency ranges across scales from .72 to .92. Test-retest reliability for the overall measure are not available.

When the general functioning subscale is removed from the analysis, the six other subscales appear relatively independent. The FAD-III demonstrates some degree of concurrent and predictive validity. In a separate study of 178 couples in their sixties, the FAD-III was moderately correlated with the Locke-Wallace Marital Satisfaction Scale (Locke & Wallace, 1959) and showed a fair ability to predict scores on the Philadelphia Geriatric Morale Scale (Epstein et al., 1983). Further, the FAD-III has good known-groups validity, with all seven subscales significantly distinguishing between individuals from families seeking family therapy and those from nonclinical families. In addition, correlations between the FAD and the Marlowe-Crowne Social Desirability Scale were uniformly low (ranging from -.06 to -.19) suggesting that social desirability has a minimal impact on this self-report measure (Epstein et al., 1983). Criterion-related (concurrent) validity of the FAD has been demonstrated in a discriminant analysis of individual FAD scores (N=218 nonclinical, N=98 clinical). The FAD predicted 67% of the nonclinical group and 64% of the clinical group in this study. A regression analysis found the FAD to predict 28% of the variance on the Locke-Wallace Marital Satisfaction Scale (Epstein et al., 1983).

Michigan Alcohol Screening Test (MAST). The MAST is a 24-item instrument specifically designed to detect alcoholism. Selzer (1971) reports that the items on the MAST were selected on the basis of a review of several other approaches to investigating alcohol abuse. Some of the items were developed to be sufficiently neutral such that persons reluctant to see themselves as problem drinkers may reveal their alcoholic symptoms. The MAST was developed with the understanding that lack of candor of

respondents may be a problem and was validated in such a way that attempted to minimize such false negatives.

Seltzer (1971) administered the MAST to several groups: 103 controls, 116 hospitalized alcoholics, 99 people arrested for drunk driving, 110 people arrested for being drunk and disorderly, and 98 people under review for revocation of their driver's licenses because of excessive accidents and moving violations. The groups were largely white and male with mean ages that ranged from 25 to 44 years. The MAST has been found to be superior as a screening device, especially in studies designed to detect alcoholics through the use of medical or legal records (Fischer & Corcoran, 1994).

The scoring of the MAST is somewhat complicated. Each item on the MAST is assigned a weight of 0 to 5, with 5 considered diagnostic of alcoholism. Weights for the items are listed in the left-hand column of the instrument. The instrument is counterbalanced such that negative responses to items 1, 4, 6, and 7 are considered alcoholic responses, and positive responses to the other items are considered alcoholic responses. An overall score of 3 points or less is considered to indicate non alcoholism, 4 points is suggestive of alcoholism, and 5 points or more indicates alcoholism.

Both the long and short forms of the MAST have excellent internal consistencies, with alphas of .95 and .93, respectively (Selzer, 1971; Seltzer, Vinokur, & van Rooijen, 1975). The MAST also has excellent known-groups validity, being able to classify most respondents as alcoholic or nonalcoholic; only 15 out of 526 people originally classified as nonalcoholic subsequently were found to be alcoholic (Seltzer, 1971). In fact, even when respondents were instructed in advance to lie about their drinking problems, the MAST correctly identified 92% of 99 hospitalized alcoholics as having severe alcoholic problems. Low correlations with the Deny-Bad subscale of the Marlowe-Crowne Social Desirability Scale suggest the affect of denial on MAST scores is weak (Seltzer, 1971).

State/Trait Anger Scale (STAS). The STAS was used to measure both state and trait anger. This instrument is composed of 30 items that assess anger both as an

emotional state that varies in intensity and as a relatively stable personality trait. Spielberger, Jacobs, Russell, and Crane (1983) define state anger as an emotional condition consisting of subjective feelings of tension, annoyance, irritation, or rage. Trait anger is defined in terms of how frequently a respondent feels state anger over time. Therefore, a person who is high in trait anger would tend to perceive more situations as anger provoking and respond with higher state-anger scores. Spielberger, Jacobs, Russell, and Crane (1983) assert that anger differs from hostility, that connotes a set of attitudes that mediate aggressive behavior. This instrument was developed with rigorous psychometric procedures, including the development of long and short forms that were highly correlated, ranging from .95 for state anger to .99 for trait anger. A shortened form of the state-anger scale (SAS) and the trait-anger scale (TAS) are composed of 10 items each. Trait anger can also be assessed with two sub scales: anger temperament and anger reaction.

London and Spielberger (1983) report that normative data are available from samples of high school students (n = 3016), college students (n = 1621), working adults (n = 1252), and military recruits (n = 2360). Among the sample of working adults between the ages of 23 and 32 years, mean female scores for the state anger, trait anger, angry temperament, and angry reaction were of 13.71, 18.45, 5.99, and 9.48, respectively. Working adult males had mean scores for the same scales of 14.28, 18.49, 5.9, and 9.5.

The trait-anger items are rated on 4-point scales from "almost never" (1) to "almost always" (4). Scores are the sum of the item ratings. Temperament and anger reaction subscales are each composed of four items. The state-anger items are rated on intensity of feelings from "not at all" (1) to "very much so" (4). Scores are the sum of the state-anger items. For both state and trait anger, scores range from 10 to 40 for the 10-item short forms and from 15 to 60 for the long forms. Higher scores reflect greater anger.

The STAS has very good reliability. The internal consistency was .87 for a sample of 146 college students (Spielberger et al., 1983). London and Spielberger (1983) found that the trait-anger measure had an internal consistency of .87 for male navy recruits and .84 for female navy recruits. The state-anger measure has excellent internal consistency, with correlations of .93 for male and female navy recruits. The anger temperament subscale had internal consistency coefficients ranging from .84 to .89 for male and female college students and navy recruits. The angry reaction subscale had internal consistency coefficients ranging from .70 to .75 for the same samples. Internal consistency, reported for the 10-item forms using the same samples, is good to excellent. All internal consistency results were based on Cronbach's alpha.

Concurrent validity is evidenced by correlations with three measures of hostility, and measures of neuroticism, psychotism, and anxiety. Scores were not associated with state-trait curiosity or extraversion (Fischer & Corcoran, 1994).

Eysenck Impulsivity Questionnaire (I.7). The Eysenck Impulsivity Questionnaire (I.7) was constructed for the measurement of three personality traits: impulsiveness, venturesomeness (sensation seeking), and empathy (Eysenck & Eysenck, 1978). The original impulsivity scale (I.5) was developed in 1978. Eysenck, Pearson, Easting and Allsopp (1985) conducted a study to both replicate the findings of Eysenck and Eysenck (1978) as well as revise and refine the I.5 by improving the scale reliability's and minimizing the intercorrelation between Impulsiveness and Venturesomeness (for a detailed discussion of the concept of Impulsiveness see Eysenck, Easting and Pearson, 1984).

The I.7 is a 54-item questionnaire containing three scales (1) Impulsiveness (19 items); (2) Venturesomeness (16 items) and (3) Empathy (19 items). It was validated on a sample of 1320 subjects with an age range of 16-87. The authors concluded that the I.7 questionnaire is an adequate measure of the three factors. Consistency reliabilities of the

impulsivity subscale and venturesomeness subscales are high (.83 and .84, respectively) and the reliability of the empathy subscale is fair (.69).

Procedure. Subjects interested in the study contacted the experimenter and were administered the phone screen. Screening questions regarding military status, marital status, marital conflict, and physical abuse were administered by telephone interview in order to assess for eligibility in this study. A copy of the phone screen can be found in Appendix D. After the phone screen, the study was explained as a study of decision making in marriage. Subjects were told that they could expect to spend 2-2.5 hours completing several questionnaires. Subjects were asked for their consent to contact their spouse to be able to administer the MCTS to them in person or via the phone. Subjects who consented to spouse contact were asked if their spouse could accompany them to their appointment so that they could be given a consent form and be administered the MCTS. Spouses unable to accompany their husbands were contacted through an alternate procedure listed below. Eligible subjects agreeing to participate were scheduled for an appointment with the principal investigator in order to complete an informed consent form (Appendix E) and then be randomly assigned to one of two groups. Subjects were administered the STAS while baseline blood pressure and heart rate measures were taken. Then the first group completed an anger recall interview (ARI) for a minimum of four minutes. Instructions for the ARI are presented in Appendix F (see Appendix F). The second group was given a neutral control task where they discussed the early history of their relationship after taking the STAS. Subjects were then administered the DMT, FAD-III, MCTS, DAS, MAST, BDI and I.7 in order as described below. Instructions on how to complete each measure were read aloud to each subject by the experimenter (see Appendix C for measures and instructions).

The decision making task was introduced to each subject (see Appendix B for decision making task). Subjects were told the task is designed to assess how people make decisions in deciding what to do in specific marital conflict situations and were then asked

to complete the decision making task. Part I includes two vignettes and a place for subjects to write in answers. The first vignette was presented to each subject both orally and in writing. Each subject was given 5 minutes to generate as many behaviors as they could for this vignette. After this was finished, subjects were given another set of instructions for part II of the decision making task. These were read aloud by the experimenter and a copy was also provided to the subject. Part III of the decision making task was a subject information form that included questions about demographic variables (age, race, years married). Upon completion of the decision making task, each subject was instructed to read and complete the remaining questionnaires.

Once all questionnaires were completed, subjects whose spouses did not accompany them but consented to spouse contact were asked to hand carry two copies of the spouse consent form and a cover letter to their wives. A copy of the cover letter and spouse consent form is located in Appendix G (see Appendix G). These forms explained that the experimenter would contact the wives by phone once the consent form had been sent back to the experimenter. After the consent form was received, the experimenter contacted the spouse and verbally administered the MCTS.

Finally, subjects were administered a debriefing in order to minimize the chances that subjects would engage in further violence because they were angry. The specific debriefing technique is listed in Appendix H (see Appendix H). Similar debriefing techniques have been widely used with this population with excellent success (Gottman et al., 1996; Jacobson et al., 1995; Vivian et al, 1995). At the end of the debriefing, the short version of the State Anger Scale (SAS) was administered. If a subject scored greater than 20 on the SAS, debriefing was extended until the SAS score 20 or less. All subjects received a follow-up phone call approximately one week after participation to answer any questions they had and to assist with referral if necessary.

Setting. All data was collected either at the Department of Psychology, Uniformed Services University of the Health Sciences, Bethesda, Maryland or at the Family Advocacy

Program, Andrews AFB, Maryland. Subjects who were currently involved in the Family Advocacy Program were notified in advance (see consent form, Appendix E) that a short summary of study participation would be given to the Family Advocacy Program serving them which included scale scores and any disclosures of physical abuse.

RESULTS

Sample Description

A preliminary power analysis was conducted in order to determine the sample size needed for the study. It was originally determined that 120 subjects (40 abusive, 40 distressed, 40 controls) were needed in order to have an acceptable chance of finding significant differences. However, the effect size was greater than expected, therefore, only ninety-six subjects (32 abusive, 32 distressed, 32 controls) were needed. The power analysis containing the new sample size and effect size is displayed in Appendix I. Subjects were recruited from local newspaper advertisements, and identified by a military or civilian agency designed to offer services to men who have been identified as having a problem with battering behavior. A majority of abusive subjects were recruited from the Family Crisis Center of Prince George's County, Maryland. Table 1 displays the actual number of subjects recruited from each source. Interestingly, seven of 32 abusive subjects were originally recruited as distressed and control subjects, but self-identified as abusers on the Modified Conflict Tactics Scale. Recruitment of abusive subjects from the community is not uncommon and several recent studies have recruited exclusively from the community (e.g., O'Leary, et al, 1997; Rosenbaum, et al, 1997).

Only five of the 96 subjects used in this study were active-duty military. These subjects were required to visit one of two sites used for data collection: The Uniformed

Services University of the Health Sciences (USUHS), Bethesda, Maryland, and Malcolm Grow Medical Center, Andrews Air Force Base, Maryland. Data was collected for six subjects at Andrews Air Force Base and ninety subjects at USUHS. This small number of subjects precluded any analysis comparing differences between military and civilian subjects or site differences. Sample demographics are shown in Table 2. Initial demographic comparisons were made between groups for age ($F_{(1, 95)}$=.985, p>.05), race (χ^2_1 =.718, p>.05) and education ($F_{(1, 95)}$=1.87, p>.05) to ensure no significant differences were present. During follow up comparisons, Type I error was corrected for by using Tukey's Honestly Significant Differences (Tukey, 1972).

Scores on the Modified Conflict Tactics Scale (MCTS) were used to determine group assignment. Subjects in the abusive group were required to endorse at least one item in the mild physical violence subscale of the MCTS (score $\geq$1). Similarly, scores on the Dyadic Adjustment Scale (DAS) and the General Functioning (GF) subscale of the McMaster Family Assessment Devise (FAD-III) were used to determine group eligibility. To be considered maritally distressed, subjects were required to be nonviolent (MCTS < 1), score 99 or below on the DAS, and score above 2 on the GF. Nonviolent subjects with scores 100 or greater on the DAS and 2 or less on the GF were placed in the control group. These cut-off scores are consistent with published norms for these instruments (Neidig, 1986; Spanier, 1976; Epstein et al, 1983). MCTS, DAS, and FAD-III scores by group are summarized in Table 3.

Significant follow up comparisons are denoted by superscripts in Table 3. The mean DAS and FAD-III scores for the distressed and abusive group indicate clinically significant levels of marital impairment. Both of these groups fall into a moderate range of

marital impairment. Statistically, the distressed group was significantly more impaired than the abusive and control groups on the Dyadic Adjustment Scale and on the General Functioning scale of the FAD-III. This finding that the maritally distressed group was slightly more distressed than the abusive group was not predicted, however, it is not without precedent. A recent study (Gearan & Rosenbaum, 1997) comparing men who batter and maritally discordant men reported similar results with the Index of Marital Satisfaction (IMS; Hudson, 1992). Gearan and Rosenbaum (1997) used the IMS to compare cognitive differences between batterers and nonbatterers. Scores on the IMS indicated that both groups were maritally distressed, but the nonbatterers were significantly more impaired than the batterers. These authors suggested that batterers did not necessarily appraise their marital functioning lower simply because of the presence of physical or verbal aggression. This finding supports the popularly held notion that the presence of violence in the home is not always as distressing for the couple as would be expected (O'Leary, 1997). It is assumed that couples who experience violence may be as dysfunctional as maritally distressed, nonviolent couples, but are not as consciously distressed. Further, statistically significant differences in global marital satisfaction measures do not always equate with clinical significance. Both groups clearly exceed the cutoff scores for marital distress on both measures and although these differences are statistically significant, both groups fall into the moderate impairment range.

Spouse Contacts

Attempts were made to collect MCTS data from the partners of the subjects in this study. Even though partners were encouraged to participate, data was collected from only five spouses. Four of these spouses were the partners of control subjects, one was the

partner of an abusive subject. Several factors accounted for this problem. First, approximately one third (34) of the subjects were uncomfortable with spouse contacts. Since this was not a requirement for participation in the study, those spouses were not approached. Second, 39 spouses never made contact with the primary investigator after their husbands participated in the study. This suggests that they were not interested, or they were never given the information by their husbands. Finally, 18 wives sent their consent forms back to the primary investigator but did not complete the MCTS. Several attempts were made to contact these individuals, but they did not return the messages left for them. Generally, individuals with answering machines were left three messages.

The implications of this missing data for the overall study findings are reasonably small. Assuming subjects were more violent than reported, this might have impacted the characterization of the sample as "mildly abusive," thus influencing generalizability. Without this data, there was no choice but to assume that violent subjects were no more violent than they reported. The data collected from the five partners did not contradict their husband's MCTS reports regarding physical or verbal violence.

Sequence Effects

The primary question corresponding to this set of analysis was, what effect, if any, does the order in which the situational vignettes were presented have on the expected utilities? Subjects were randomly assigned to one of two permutations of the two situations. It was hypothesized that sequence effects would not exist for the within-subjects variable situation. That is, the order of the two situations (high risk, neutral) would not influence responses.

This model was used for each of the eight behavioral alternatives (behaviors) collapsed across the situations (the within-subjects variable). Group membership was added to the equations before order. Because group and order are discrete variables, these variables were dummy-coded (Cohen & Cohen, 1983). The complete results for each of the eight equations are shown in Table 4. None of the behaviors had a significant proportion of their variance accounted for by the independent variable order. Consequently, order was not examined further.

Transitory factors potentially impacting decision making

McFall (1982) suggests that there may be several transitory factors that impact the decision making process. In this study, alcoholism, depression, and impulsivity were measured in order to control for the possible effects such factors might have on decision making during marital conflict. The means, standard deviations, and range of scores for the MAST, BDI, and I.7 are listed in Table 5. Significant differences are noted by superscripts.

Alcohol

One way Analysis of Variance with follow-up comparisons revealed no differences in MAST scores between groups. The means across all three groups were also within normal limits on the MAST, suggesting minimal problems with alcohol in this sample. A score of 5 or greater on the MAST is indicative of past or current alcohol dependence. Scores below 4 are considered normal (Seltzer et al, 1975). All subjects scored a 4 or below with the exception of two in the abusive group. These individuals each scored 15 and 17. When asked about these high scores, both subjects reported a past history of

drinking problems. Each individual stated that they had been sober at least one year and were not currently drinking.

Alcohol use is seen as a significant transitory factor in decision making. Therefore, the original rationale for using the MAST was to measure the current level of alcohol usage in order to better understand the role of alcohol use on the decision to be violent However, the MAST may not be the correct instrument to use in order to assess the role of alcohol use in decision making. Because the disease model of alcoholism suggests that once an individual is an alcoholic, they are always an alcoholic, the MAST is sensitive to both past and present alcohol problems. For the purposes of this study, there was no way to determine the extent to which a past or present history of alcohol abuse influences decision making when an individual is sober. Although no formal checks were made to determine whether or not subjects were under the influence of alcohol at the time they completed the decision making task, the primary investigator looked for evidence of intoxication in each subject and found none.

Depressive Symptomatology

Published norms for the BDI suggest that scores ranging from 0 to 9 fall into the "minimal" category and are considered asymptomatic (Beck et al, 1979). Interestingly, group means are all within these normal limits. However, between groups analysis revealed the abusive and distressed groups have higher BDI scores, but fall into the normal range.

Because the means for the MAST, BDI, and Impulsivity all fall within a normal range for each group, this suggests that depression, alcoholism, and impulsivity are all

non-significant transitory factors in this sample. Therefore, these factors were not used as covariates in the analysis of the following hypotheses.

Impulsivity

One-way analysis of variance with follow-up comparisons revealed no differences in impulsivity between groups. The average score for men aged 18-50 for the impulsivity scale is approximately 8.8 (Corulla, 1987). All three groups scored within the normal range for impulsivity. That is, the average subject, regardless of group membership, was about as impulsive as the average adult male in the sample used to validate this instrument.

Validity of the Anger Recall Interview

State anger was assessed to ensure that the three comparison groups (abusive, distressed, control) were not significantly different in current state anger prior to random assignment to the anger/neutral recall condition. The means and standard deviations for the abusive, distressed and control groups were 16.6 (2.1), 18.0 (3.2), and 17.6 (2.5) respectively. Fischer and Corcoran (1994) report that the average SAS score for a normative sample of working adult men ages 23 to 32 was 21.4 (2.1). The minimum score on this instrument is 15 with maximum of 60. Higher scores reflect greater state anger. One-way analysis of variance with follow-up comparisons revealed no differences in state anger scores between groups. No differences were found between groups on the SAS and mean scores on the SAS were all well below established norms for each group. Therefore, state anger prior to the anger/neutral recall interview was not used as a covariate in the overall analysis. The SAS was not administered to assess state anger after

the anger recall. It was, however, used to assess anger after the debriefing procedure and prior to departure to satisfy IRB requirements.

Laboratory manipulations of affective experiences have received criticism from researchers who believe that self-report data is not sufficient to assess whether the procedures actually accomplished what they were design to attain (e.g., Krantz, Grunberg, & Baum, 1985). In order to validate the effectiveness of the anger recall interview to arouse anger, blood pressure and heart rate data were collected prior and during the anger/neutral recall interviews. At least three blood pressure readings were taken at three minute intervals prior to the administration of an anger or neutral recall interview. During baseline, subjects were introduced to and completed the MAST. The two baseline blood pressure readings closest in time to the ARI or NRI were included in the analysis. Similarly, two blood pressure readings were taken during the interview. Table 6 displays the physiological measures taken during the respective interviews as well at baseline.

A 2 x 2 repeated measures ANOVA with follow up comparisons was used to test if there was a significant difference between conditions at baseline or during the interview. The data in Table 6 reveal significant differences between conditions for the diastolic and systolic blood pressure readings during the interview. Only one difference existed between conditions during baseline. The condition that received the neutral recall interview (NRI) had slightly higher diastolic blood pressure than those subjects receiving the anger recall interview (ARI) measures. After the interviews, ARI subjects had significantly greater systolic and diastolic blood pressure readings than NRI subjects. As expected, these physiological increases supported the impression that subjects in the anger recall condition were physiologically aroused during the interview.

Additionally, a significant change in blood pressure and heart rate from baseline to interview was found for the anger recall condition. Changes for heart rate ($F_{2,94}$=3.19, $p< .01$), systolic blood pressure ($F_{2,94}$=4.63, $< .01$) and diastolic blood pressure ($F_{2,94}$ =5.79, $p< .01$) were all found to be significant. These findings suggest that the anger induction interview did indeed produce a physiological arousal in the subjects who received this procedure.

Hypothesis 1: Is the utility of abusive behaviors higher for angry abusers?

The goal of this set of analyses was to investigate how the subjective expected utilities (SEUs) differed between groups (abusive, distressed, control), across conditions (anger recall condition, neutral recall condition) and across situations (high risk, control). Specifically, it was expected that the anger recall condition would increase the expected utility of verbally and physically aggressive behavior for the abusive group and decrease the SEUs of healthy behaviors for all groups. Additionally, it was expected that the high risk situation would increase the SEUs of abusive behaviors for the abusive group.

Each behavior was considered individually. Hierarchical regression was employed to determine if group, anger condition (anger/neutral recall interview), and situation accounted for a significant amount of variance for each SEU. Dummy-coding was used for these discrete variables as well as for the two-way and the three-way interactions (see Jaccard, Wan & Turrisi, 1990). Anger recall was coded as one vector. Group was coded as two vectors with the abusive group as the comparison group in each vector (G_1 = abusive group vs. distressed group; G_2 = abusive group vs. control group). The exploratory nature and complexity of this research design increases the likelihood of type II error. Therefore, Cohen and Cohen (1983) suggest that it is acceptable to substitute the

final error term of the regression equation into each step of the regression equation rather than using the partial error term at each step. Table 7 displays the R-squared at each step for all eight behaviors, using this method.

Group Effects: Did SEUs differ by group?

As expected, the abusive group rated abusive behaviors with greater utility than the other groups. That is, abusive behaviors had greater utility for the abusers. The results shown in row 1 of Table 7 indicate significant R-squared for all of the abusive and manipulative behaviors. In fact, the only two behaviors that were not significantly different were the healthy behaviors, "compromising" and "rethinking your position." The abusive and manipulative behaviors had higher utilities for the abusive group compared to the other groups. The mean SEUs by group and anger condition are presented in Tables 8-13 for each behavior. SEUs for each group are shown in the far right column of Tables 8-13 with the significant relationships represented by arrows (>). Significant group effects independent of significant interactions were found for all of the manipulative and abusive behaviors using repeated measures ANOVAs. These findings are also listed in Tables 8-13. Betas for the between group differences for SEUs are displayed in Table 16. These results suggest that overall the manipulative and abusive behaviors were all seen as more viable options by the abusive group regardless of situation or anger condition. Variation is due to main between groups effects, however, these findings can be further understood by examining several significant group by anger condition follow up interactions.

Group by Anger Condition: Did group SEUs differ when angry?

As shown in Table 7, significant group by anger induction interactions were found for "physical aggression," "verbal aggression," "threaten you spouse," "do nothing," and

"beg and plead with your partner." These results are depicted in bold on the first row of Tables 8-12. As hypothesized, abusive subjects who were assigned to the anger recall condition rated the utility of "physical aggression," "verbal aggression," and "threaten your spouse" higher than any of the other five (group by anger) cells. This finding supports the hypothesis that aggressive behavior has greater payoff for angry abusers.

A significant group by anger effect was found for the behavior "beg and plead with your partner." The first row of Table 12 reveals that abusive subjects assigned to the anger recall condition gave "beg and plead with your partner" a much lower SEU suggesting that abusive subjects find begging and pleading with their partner to be much less appealing when they are angry. Perhaps more striking is how appealing begging and pleading was to abusers who were not angered suggesting that non-angered abusers were much more likely to engage in this behavior when compared to the other groups.

Conversely, abusive subjects had higher SEUs for "do nothing" for the anger recall condition. This finding is illustrated in the first row of Table 8. In this case an indirect approach to marital conflict resolution (do nothing) was more appealing to abusive subjects who were angered by an anger recall interview. This finding may suggest that men with a history of engaging in violent behaviors during marital conflict may prefer to "do nothing" as a means of keeping the conflict from escalating. However, specific conclusions cannot be accurately drawn at this time.

It is important to note that, according to MAUT, the behaviors with the highest SEUs are expected to predominate. According to Tables 8-13, the healthy behaviors have the highest utility. This observation holds true regardless of group membership or anger condition. This denotes that the most likely choice of action would be to engage healthy

behaviors. That is, behaviors like "compromise" and "rethink your position" would be expected to have the most usefulness. Tables 8 and 12 suggest that manipulative behaviors "do nothing" and "beg and plead with your partner" are less useful than the healthy behaviors, but more useful than abusive behaviors. As expected, Tables 9-11 indicate that abusive behaviors such as "physical aggression," "verbal aggression," and "threaten your partner" had lower SEUs than healthy and manipulative behaviors.

Interestingly, the anger condition appears to have a significant effect on the SEUs of the healthy behaviors. In particular, subjects assigned to the anger condition have lower SEUs for healthy behaviors than those assigned to the neutral condition. This indicates that, for all subjects, healthy behaviors are less appealing when they are angry. Although the abusive group rated healthy behaviors with the highest SEUs, they rated unhealthy behaviors with higher utilities than the other two groups, especially when they were assigned to the anger condition. This finding indicates abusive subjects rate unhealthy behaviors more favorably when they are angry. However, the utility rating is just one of several necessary steps in the decision making process according to McFall (1982). Other factors such as the perceived ability to successfully carry out behaviors might rule out the use of healthy behaviors in certain situations, leaving abusive behaviors as seemingly viable options. This aspect of the decision making process is tested in hypothesis two and will be discussed later.

High-risk situations

It was initially proposed that a high-risk situation would influence the expected utility of abusive behaviors for the abusive group. It was expected that the utility of abusive behaviors would increase for the abusive group during the high-risk situation.

However, the situation manipulation did not impact decision making as originally hypothesized. Only two significant findings were associated with the situation manipulation. First, a significant group by situation effect was found for "do nothing." The abusive group gave a lower utility ranking for "do nothing" during the control situation. This suggests that there is less perceived utility in doing nothing if the risk of conflict is relatively low. Lastly, a significant situation by anger condition interaction was found for the behavior "rethink your position." Non-angered subjects assigned a higher SEU for "rethink your position" during the high-risk situation. This finding suggests that when subjects who were not angry entered into a more volatile situation, they rated "rethinking your position" with a higher SEU. No other situation effects were found. Therefore, these findings were not examined

SEU Component Analysis: Why did the SEUs differ?

There were differences between groups for every behavior except "compromise" and "rethink your position". These findings indicate that, as expected, behaviors differed between groups and the anger condition had a significant impact on the decision making of abusive subjects. Although abusive behavior did not have higher utility than nonabusive behavior, the utility increased or decreased as expected. The next question is why did the SEUs differ? The following sections present an analysis of the SEU components. The components were examined in order to see if these SEU differences could be accounted for by changes in behavior by attribute ratings and/or changes in importance weights.

A multiple regression framework was employed in order to better understand the SEU differences for the six abusive and manipulative behaviors described earlier. Seven components, corresponding to the seven attributes, were used to predict the subjective

expected utility for the abusive and manipulative behaviors. (The attribute component is comprised of the attribute importance weight multiplied by the attribute by behavior rating). These attribute components are listed in Table 17 for the six behaviors abusive and manipulative behaviors.

These results suggest that two components, "control" and "fix the problem," accounted for a significant proportion of the variance for the behaviors "do nothing," "physical aggression," "verbal aggression," "threaten your partner," and "act out towards property/pets." Additionally the component "partner's self-image" accounted for a significant proportion of the variance for the two behaviors "verbal aggression" and "threaten your partner."

Further analyses were conducted to examine the two elements comprising the attribute component. The question here is which element caused these components to account for a significant proportion of the variance? Two separate analyses examined (1) the contribution of the behavior by attribute ratings (e.g., control x physical aggression) and (2) the contribution of the importance rank for the attributes.

Why are the SEUs different: Examination of the Behavior by Attribute ratings

For the first set of analyses, the behavior by attribute ratings for control, fix the problem, and partner's self-image were examined across the behaviors they significantly predicted in Table 17. The findings are summarized by attribute component in Tables 18-20.

Examination of the impact of abusive and manipulative behaviors on "control"

These findings suggest that control is especially important for abusive subjects across the five manipulative and abusive behaviors. Because the group differences in hypothesis one

were at least partially explained by significant group by anger condition interactions, the means for six group by anger condition cells were examined. These are listed in Tables 18-20. Further analysis revealed the significant group effects are accounted for by the abusive subjects assigned to the anger condition. For "do nothing," "physical aggression," "verbal aggression," and "threaten your partner," the abusive group in the anger manipulation displayed significantly higher behavior by attribute ratings for control than the abusive group in the neutral manipulation. This implies that control is especially important for angry abusive men when they choose to engage in verbal and physical violence.

Examination of the impact of abusive and manipulative behaviors on "fix the problem" Similarly, for the abusive subjects in the anger condition the manipulative and abusive behaviors had a much greater impact on "fix the problem." This finding suggests that angry abusive men may believe that "do nothing," "physical aggression," "verbal aggression," "threatening your partner," and "acting out toward pets or property" will serve to fix the marital conflict (see Table 19). This also suggests that the definition of fixing the problem may be different for abusive subjects. For example, they may consider the problem "fixed" if their partner complies with their wishes. It is also possible this finding represents a distortion in thinking when compared to the other groups, as these groups rated the probability of these behaviors fixing the problem much less. While it may appear to angry abusive subjects that abusive and manipulative behaviors actually fix the problem, it has been repeatedly shown that abusive and manipulative behaviors often inflict severe damage on intimate relationships.

Examination of the impact of abusive and manipulative behaviors on "partner's self-image" The angry abusive group also rated the behavioral impact of "verbal aggression" and "threatening your partner" on their partner's self-image as much more positive. That is, this group did not comprehend the negative impact these behaviors would have on their partner's self-image. Higher scores indicate a more positive impact on one's partner. It is important to note that even though these findings are statistically significant, their clinical significance is limited due to the relatively low rating given. However, the results of Table 20 indicate that these ratings significantly influenced the SEUs for verbal aggression and threatening one's partner.

In summary, this analysis revealed that control is particularly important for angry abusive men when they choose to engage in violent and manipulative behaviors. These results also exhibited two potential perceptual changes held by angry abusers. First, this group appears to think that abusive and manipulative behavior is more likely to fix a marital conflict with little regard to the long-term consequences of such behavior. Second, this group appears to minimize the impact that threatening and verbally aggressive behavior have on their partner's self-image.

Why are the SEUs different: Examination of the Importance Weights The importance weights for the three significant attributes were also examined across groups and displayed in Table 21. This examination provided insight into why the SEUs differed. First, "control" was rated as much more important by the angry abusive group when compared to the other groups. This outcome suggests that control is very important for angry, abusive subjects. Interestingly, for the control group "fix the problem" was much more important than for the abusive group regardless of anger condition. This effect

indicates that fixing the problem is less important for the abusive or distressed groups. Finally, the importance rating for the "impact on my partner's self-image" did not appear to differ between groups or conditions. That is, it did not explain the SEU.

Hypothesis Two: Does the Perceived Ability to Engage in Healthy Behaviors Differ by Group?

Findings from Hypothesis one indicate healthy behavior had the greatest utility. Clinically, abusers often are able to readily identify the healthiest behavior to employ for conflict resolution. Yet, by definition, they do not always employ these behaviors. One possible explanation for this phenomenon is that skills deficits may exist in this population such that they do not know how to perform healthy behaviors. Therefore, it was hypothesized that the abusive and distressed groups would rate their ability to perform competent or healthy behaviors lower than the control group for both vignettes. Additionally, distressed and abusive subjects assigned to the anger recall condition were expected to more negatively perceive their ability to execute healthy behaviors. To examine this question, the design was conceptualized as a repeated measures mixed design with a three level between-groups factor, group (abusive, distressed, control), a two level between-groups factor, (anger condition), and an eight level within-groups factor, behavior (each of the 8 behaviors corresponds to a level). The behavior by group interaction ($F_{2, 94} = 3.23$, $p < .05$), and the anger condition by group interaction ($F_{14, 82} = 5.74$, $p < .01$) were expected to be significant.

Of greatest interest, abusive subjects rated their perceived ability to accomplish healthy behaviors much higher when they were not angry. Tables 22 and 23 exhibit these differences. This finding is especially remarkable for the behavior "compromise." In this

case, angry abusive subjects perceived ability for "compromise" was significantly lower than all five other groups. The same relationship held true for the behavior "rethink your position." These findings indicate that when abusive subjects were angered, they perceived themselves as much less able to perform healthy behaviors. This discovery has some important implications. Perhaps the greatest implication of this finding is the effect on the probability of choosing healthy behaviors in marital conflict situations. Even though abusive subjects rated healthy behaviors with the highest SEUs in hypothesis one, it is evident that their lessened perceived ability to successfully accomplish these behaviors could have a profound impact on their final selection. For example, if an angry abusive subject is involved in a marital conflict, he may not select the healthy behavior that he thinks has the most utility because he does not think he can execute it. He would then be more inclined to choose a behavior that he feels he can execute, even if it has less subjective utility.

In addition, abusers perceived their ability to threaten their partner as much greater when angered. They also indicated they would not be able to beg and plead with their partners when angry. Table 24 displays the tendency for abusive subjects to perceive their ability to execute threatening behavior towards their spouse much higher when angered. Additionally, abusive subjects rated their ability to beg and plead with their partner much higher when not angered. These results mirror the earlier findings regarding subjective utility of these behaviors, suggesting that abusive subjects are more likely to carry out aggressive threatening behavior when angered, and less likely to accomplish less direct, manipulative behavior when calm.

A follow up examination of the significant Behavior by Group effects revealed that the abusive and distressed groups provided a lower perceived ability rating for healthy behaviors than the control group. The means are shown in Table 26 with the relationships represented by arrows (>).

Follow up comparisons revealed two important differences. First, as predicted the abusive and maritally distressed groups rated their ability to carry out healthy behaviors significantly lower than controls. This supports the original hypothesis that the abusive group and the distressed group would rate their ability to execute healthy behaviors significantly lower than the control group. Secondly, abusive subjects reported their perceived ability to act in an abusive manner nearly three times greater than controls. This finding is not surprising, since these individuals have engaged in this behavior previously, whereas individuals in the distressed and control groups have not. No differences in perceived ability between the distressed and control groups were found.

DISCUSSION

The results of this study support the usefulness of a decision making model in the conceptualization of battering behavior. These data suggest that abusive men display differences in decision making. The utility of verbally and physically abusive behaviors is much higher for angry abusers than any other group. Higher utilities imply more can be gained from performing these abusive behaviors.

As discussed in the introduction, MAUT is often used as a framework to assist individuals in making decisions by quantifying the decision process. Aggregate values for each behavior are calculated using MAUT formulas and the behavior with the highest

aggregate value is said to dominate. This study suggests that the healthy behaviors such as "compromise with your partner" and "rethink you position" predominates for every group, including angry abusers. Mild abusers do not hit their partners most of the time. Although abusive behaviors did not predominate for the abusive subjects in this study, there is evidence of a perceptual change when abusers are angered. This perceptual change brings the utilities of healthy and unhealthy behaviors closer together. The utilities of the abusive behaviors increase with anger and the utilities of healthy behaviors decrease with anger. This relationship increases the likelihood that abusive behaviors might be selected. Of note, these same perceptual changes are not seen among nonabusive groups. That is, the utility of manipulative and abusive behavior do not differ for the distressed and control subjects. These perceptual changes are discussed below.

Interestingly, begging and pleading with one's partner as a means to resolve marital conflict has higher utility for abusive and distressed subjects when they are not angry. That is, abusive and distressed subjects view this behavior as a much more viable option when calm, but not when angry. "Beg and plead" can be conceptualized as a rather "passive-aggressive" behavior that is intended to acquire or maintain control of a situation in a manipulative way. These results appear intuitive, since it is often more difficult to take a passive role in conflict situations when angered. That is, when an individual is angry, the tendency is to want to act out that anger rather than behave in a passive manner. This difference is especially pronounced for the non-angry abusive group. In this case, the SEU increases dramatically, indicating that the appeal of begging and pleading is very high when they are not angry compared with several other behaviors. This finding supports previous research which holds that physically and verbally abusive behavior is

often used in conjunction with manipulative behavior in order to gain power and control over an environmental interaction (e.g., Yllo, 1994).

One of the main perceptual changes appears to be perceived control. In this study, control is operationalized as the ability to influence one's environment in order to get one's way. Angry abusive subjects rate control as more important. Therefore, control differentially impacts behavior choice to a greater extent. This need for abusers to be in control during imaginary marital conflict makes those behaviors associated with higher levels of control (e.g., physical and verbal aggression) more attractive. This suggests angry abusive subjects perceive manipulative and abusive behaviors as a much more effective means of controlling or influencing the marital conflict when compared to all other groups.

The fact that control has a major influence on the behavior of abusers comes as no surprise. In fact, one of the most popular group programs for men who batter is designed exclusively on the issue of control (Pence & Paymar, 1993). The relative importance of control for angry abusers is particularly noteworthy. It is more important than any other attribute. The relative importance of the attributes is much more balanced for the distressed and control groups. For the other groups, control is important, but no more important than other outcomes such as self-image and the quality of the marital relationship. That is, attributes that pertain to the potential impact of behavior on factors such as self-image and the quality of the marital relationship are just as important as getting one's way.

Abusers perceive two other attributes, "fix the problem" and "partner's self-image," to be significantly important for several behaviors. Angry abusive subjects

appraise the importance of "fixing the problem" significantly greater than the other groups for all of the abusive and manipulative behaviors. Angry abusive subjects perceive that engaging in abusive and manipulative behaviors would result in the problem being fixed. This is a problematic perception because, although the conflict may be diverted in the short term, abusive and controlling behaviors greatly harm the relationship in the long term.

Angry abusive subjects also rate the impact of verbal abuse and threats on their partner's self image as greater than the other groups. This finding indicates that angry abusive subjects do not perceive verbally abusive and threatening behavior to be as harmful to their partner's self image. Here too, the angry abusers misperceive the impact of their behavior on critical outcomes. In a group treatment, when abusers are not angry they acknowledge these outcomes are important (e.g., the positive outcomes) and voice a desire to change. The same thing frequently occurs between the couple after abuse. The abuser expresses remorse and concern for the pain he may have inflicted during a violent outburst. However, this study suggests the perception is different when angry. This has specific implications for assessment and treatment that are addressed below under clinical implications

It was initially hypothesized that abusive behavior would have the highest utility overall for the abusers. There are many reasons why this may be the case. First, the sample of abusive subjects was comprised of mildly abusive men. For most abusive subjects, the frequency of physically abusive behaviors was quite low. By definition, mild abusers do not engage in abusive behaviors most of the time. Most of the abusive subjects report only one incident of physical violence in the month prior to participating in this

study. However, it is likely that they had more than one incident of marital conflict. This suggests they deal with these other incidents by some means other than violence. They may engage in healthy or manipulative behaviors in order to resolve the marital conflict. It is possible that the magnitude of the ratio of healthy behavior to unhealthy behavior may be related to the level of violence. Therefore, it would be expected that mildly abusive subjects would rate the utility of healthy and/or manipulative behaviors higher when compared to more violent subjects.

Unfortunately, spouse data is generally not available so there was no way to corroborate these reports. Several family violence researchers indicate spouse reports are the gold standard by which to measure abusive behavior and spouse reports have become a very popular means of verifying the accuracy of self-reports (e.g., Brannen & Rubin, 1996; O'Leary, Heyman & Neidig, 1997). It is possible that individuals who engage in abusive behavior toward their spouses may have been categorized as nonabusers in this study if they denied physical abuse on the MCTS.

Second, McFall (1982) contends that nonviolent or competent responses can only be performed if the individual perceives they have the skill to perform appropriate behaviors for the situation. McFall (1989) also assumes that decision making is transacted in a sequential manner where the repertoire search is done prior to the utility evaluation. That is, if the individual perceives that they do not have the necessary skills to perform the behavior, the option will be rejected before it's utility will be assessed. As hypothesized, abusive subjects perceive themselves as having a lower ability to perform healthy behaviors when compared to the control group. No differences were found between the distressed group and the abusive group. That is, subjects in the control group perceive

themselves as having a greater ability to perform appropriate behaviors than the maritally distressed group and the abusive group. This finding, coupled with McFall's contention that repertoire search is done first, suggest that abusive subjects might reject healthy behaviors when they are angry and engage in behaviors in their repertoire, namely abusive and manipulative behaviors.

Additionally, abusive subjects rate their ability to perform abusive behaviors much higher than the other two groups. This suggests that abusive behaviors are much less likely to be rejected by the abusive groups prior to assessing their utility. This finding supports the SIP model as well. It would be expected that individuals who have previously engaged in a given behavior would rate their ability to perform that behavior more highly than an individual who had not. This increase in perceived ability would increase the probability that abusive behaviors would be performed.

Thus while abusive subjects might perceive healthy behaviors as more useful in resolving marital conflict, they are unlikely to choose these behaviors if they do not perceive that they can execute them successfully. This appears to be especially true for abusive subjects who are angered. Unfortunately, there is no way of knowing from this study whether abusive individuals have actual skills deficits or simply perceived skills deficits. Future research could examine this by having couples enact an argument in the laboratory to differentiate perceived skill deficits from actual performance deficits (e.g., Gottman et al, 1996).

Third, the high risk situation did not impact decision making. These findings suggest that reading vignettes was not as relevant or as potent as a real life situation. One means to address this issue would be to use the specific situations where subjects chose to

be violent. Essentially, the anger recall interview accomplishes this by focusing on situations that were specific to each subject. The physiological evidence suggests that this manipulation worked.

Fourth, a desire for subjects to appear socially desirable might have impacted the SEUs for the behaviors. In particular, this could have lowered the SEUs for the manipulative and abusive behaviors and/or increased the SEUs for the healthy behaviors. Although the decision making task does not appear to be completely face valid to subjects, the healthy behaviors are clearly the most socially desirable behaviors. Adding a scale that measures social desirability such as one created by Christy (1967) or Marlow and Crowne, (1976) and then using social desirability as a covariate in the analyses could help to control for this potential intervening variable.

Fifth, an examination of the model suggests it is weighted in favor of the healthy behaviors. That is, there are more potentially positive outcomes (five out of seven) for the healthy behaviors and, therefore, there may be a greater likelihood for the SEU of the healthy behaviors to be greater. If there were other potentially positive outcomes for abusive behaviors, they would be expected to increase the utility of the abusive behaviors but not impact the other behaviors. Thus, this would not impact the overall findings of the study that suggest the abusive behaviors have higher utility for the angry abusers. The attribute list was constructed from brainstorming sessions with mental health professionals working in domestic violence treatment. It is possible this model may be biased due to the use of mental health professionals rather than abusers or that an important attribute may have been missing. A review of the literature after this study had begun revealed that a potentially important attribute, your spouse's reaction, may have

been overlooked (Riggs & Caulfield, 1997). Though some of this is implied in the attribute or attributes that are relevant to the marital relationship and their spouse's self-esteem.

In addition, to understand why the healthy behaviors had the highest utility, the findings need to be considered in the context of the study, a controlled laboratory investigation. Such a setting is expected to be less innocuous than an actual marital conflict situation. That is, the manipulation is not as potent as a real life situation. This implies that in a real life situation the utilities may have been different (i.e., greater for abusive behaviors). The physiological data indicates that subjects in the anger recall condition did get angry. However, the physiological evidence is somewhat limited because measures were only taken during baseline and the anger condition. Additional heart rate and blood pressure readings taken after the anger condition was applied would measure the recovery phase and might offer additional support to the effectiveness of the anger recall interview. In addition the use of self-report measures to assess anger in addition to physiological measure would more accurately examine the level of anger.

Previous research comparing abusive subjects to maritally satisfied, non-abusive subjects has been criticized because there has been no way of knowing whether the differences found in that research existed as a result of marital discord. Therefore, the use of a maritally distressed comparison group has now become more common (e.g., Cascardi et al, 1992; Gottman et al, 1996). In fact, the use of a maritally distressed comparison group has been enthusiastically supported in prior research on the decoding phase of the SIP model (e.g., Gearan & Rosenbaum, 1997; Holtzworth-Munroe & Hutchinson, 1993) because a maritally distressed comparison group serves to control for

the influence of marital distress. In this study, the maritally distressed group most closely resembled the control group on the decision making task. Aside from serving as a comparison group for the abusive group, the use of a maritally distressed comparison group yields little additional information to this study. Perhaps the most important difference is the perceived ability of maritally distressed men is significantly lower than the control group for healthy behaviors. This finding implies that maritally distressed subjects perceive themselves as deficient as the abusive group is in executing healthy behaviors. This is the only case where the maritally distressed group resembles the abusive group. Because the maritally distressed group does not appear to be unique from the control group, only one comparison group may be necessary in future research employing this model.

Potential Clinical Implications

A social skills model such as the SIP model conceptualizes abusive behavior as a problem of deficient social skills for resolving marital conflict. The emphasis is placed on the interpretation of social information, the decisions that are made, and the actions that result from those decisions. MAUT provides a more precise means of conceptualizing the decision making processes of the SIP model, particularly in the area of utility evaluation. The present study created a decision making model that closely examined the decision making processes of men who batter as a means of explaining the rationale used by abusers when they choose to act in an abusive manner. In particular, this model gives information regarding which aspects of the decision making process are important to individuals and compares the utility of the abusive behaviors that programs are designed to extinguish (e.g., physical and verbal aggression) with the healthy

behaviors that are being reinforced (e.g., compromise). This model has several important implications for both assessment and treatment for men who batter.

Interestingly, treatments for abusive men largely focus on anger management techniques. These techniques teach men to avoid anger escalation by using methods such as self-monitoring, stress management, self-control planning, and time-out. These anger management techniques teach individuals to manage their escalation so they do not reach a critical threshold and "blow up." In essence, escalation is conceptualized in the same way as an action potential. Once the threshold is reached, the action potential is imminent. These techniques are useful in preventing or avoiding angry outbursts, however, the findings of this study suggest abusive individuals still need to learn how to behave when they are angry. This study suggests that conflict management when angry would be important because abusers perceive information differently under these conditions. These perceptual differences appear to occur despite the endorsement of prosocial or positive behaviors in other conditions. That is, abusers may know what is "right" and may be able to perform these behaviors in general. Abusers could actually be taught that there is a difference in how they process information when angry and treatment could evoke an anger response in order to teach individuals specific skills when angry. It is not enough to expect abusive men will learn to maintain a consistently low level of anger. This is particularly true of men who continue in their marriages since a great deal of marital conflict often needs to occur in order to resolve prior conflicts and mend the damaged relationship. These results suggest a couples group format may offer the most useful means of helping these men learn to manage marital conflict when angry.

Conflict resolution training in this environment is less artificial and is more likely to evoke an anger response in a potent and natural manner.

As previously noted, control was found to be very important for angry abusers. In fact, a major focus of several treatment protocols is to alter behaviors designed to control the actions of one's partner. Because control appears to have such an influence on the decision making processes of men who batter, this study suggests perceptions regarding control be shifted into domains that are not as aggressive and damaging to others, namely one's partner. Specifically, Plotcki and Everly (1989) outline three alternative means of meeting needs for control other attempting to directly control or change one's environment that can be emphasized in batterer treatment programs. They are (1) increasing the ability to predict interactions with one's environment, (2) increasing the ability to understand these interactions and (3) increasing the ability to accept such interactions within some meaningful cognitive framework or belief system.

Because control tends to be an important factor for the angry abuser, it would also be useful to incorporate certain cognitive restructuring strategies into standardized treatment protocols. Targeting an increased need for control appears to be an essential component of treatment. This is already addressed in several treatment protocols, however, its impact on decision making is not always emphasized.

The findings of this study suggest another potential clinical application. Specifically, emphasis should be placed on the discrepancy between the short-term gains versus the long-term costs of abusive and manipulative behavior (e.g., Miller & Rollnick, 1991). Angry abusers report a belief that abusive and manipulative behaviors solve marital problems in a more effective way. This suggests that angry abusive men are

focusing on the short-term gains of abusive behavior without taking into account the negative long-term costs. Abusive and manipulative behaviors rarely, if ever "fix the problem" in the long-term. In fact, abusive and manipulative behaviors often add to the problem and decrease the quality of the marital relationship. Emphasizing short-term gains versus long term costs is one means of addressing this cognitive shift in angry abusers.

More generally, these findings have implications on the development of assessment measures. Since decision making skills differences were found in this population, measures can be designed to assess the specific decision making processes of abusive persons when they are angry. Such an instrument identifies not only the behaviors that appeal most to the individual, but also assists in understanding why such behaviors are appealing is this case. For example, if abusive behavior (e.g., physical aggression) has high utility for an individual, the weighted average (behavior x attribute ratings) and importance weights could be examined to understand why the behavior has high utility (e.g., limited understanding of the impact of abusive behavior). This information would be useful in targeting specific behavioral deficits and excesses and could also be used to target outcomes for cognitive restructuring (e.g., emphasize the long-term costs of abusive behavior on your marital relationship compared to the short-term benefits of abusive behavior). That is, an individualized assessment could lead to interventions that specifically target components in treatment designed to meet the individual's needs rather than relying exclusively on a more standardized treatment protocol.

The findings of this study also suggest that cognitive restructuring that addresses misperceptions regarding the influence of violent and manipulative behavior on "fixing the problem" and the minimization regarding the impact of verbally aggressive and threatening behavior on the self-esteem of one's spouse are likely to be fruitful. After the intervention is completed, decision making measures should be used in a pre-post fashion to assess treatment effectiveness and to predict future violence.

Future Research

As previously mentioned, the physiological evidence from the anger recall suggests subjects became angry. This may have occurred because the interview focused on situations that were specific and relevant to each subject. This suggests that future research may want to incorporate real life examples and real life provocation for several reasons. Although the anger recall manipulation evidenced mild physiological arousal, it is very likely that subjects did not become nearly as aroused as they typically do during marital conflict. This is particularly problematic with the abusive subjects who may need to become extremely angry before experiencing a perceptual change and choosing to act in a violent manner. One means of increasing anger arousal would be to bring couples into a laboratory environment and enact an argument. This method of research has become increasingly popular in recent years (e.g., Babcock et al, 1993; Cascardi et al, 1992; Gottman et al, 1996) in order to better understand marital conflict. This method of research could be used to magnify arousal prior to the administration of a decision making task. It is expected that increased anger that is spouse specific would increase the perceptual changes found to occur in the present study.

Another reason to incorporate real life provocation and real life examples into future research would be to increase the understanding of why mildly abusive men choose to act violently. As previously mentioned, the situation manipulation in this study did not work as expected. The reports from this mildly abusive sample indicate that physically violent behavior is infrequently chosen. This decreases the likelihood that the high risk situation used in this study is specific and relevant enough this group to cause the SEU ratings of abusive behavior to be the highest, leading to the choice to act in an abusive manner. One means of overcoming this limitation would have abusive subjects indicate a current situation where they decide to be violent and contrast that to a low risk situation. This comparison would be expected to increase the understanding of the decision making processes specific to abusive behavior.

This study suggests that angry abusers believe that control is extremely important. However, there is no way to know for sure if this finding is completely due to anger induction. One alternative interpretation is that control is very important to this group at all times, not just when angered. One means of controlling for this potential limitation would be to incorporate a scale that measures the desire for control in all interpersonal interactions. One such scale is the Way of Life scale (Wright, von Bussman, Friedman, Khoury, Owens, & Paris, 1990). This scale is designed to measure exaggerated social control in both social and domestic situations. The scale score could be used as a covariate in order to statistically control for the baseline level of interpersonally controlling behavior.

The role of alcohol in decision making is worthy of future study. There is abundant evidence suggesting that alcohol is related to violence. In a review of the

literature, Gelles and Cornell (1990) found that between 36 percent to 52 percent of all wife abusers also abused alcohol. Flanzer (1993) argues that alcohol use is an instigator of violence. Flanzer believes that alcohol abuse serves as a rationalization for violence by allowing the batterer to avoid taking responsibility for his or her actions. If this is true, alcohol intoxication is likely to change the ratings given by abusive subjects. In fact, abusive behaviors may be seen as having maximum utility when abusive subjects are intoxicated. One method to test this hypothesis would be to randomly assign subjects to an intoxication/no intoxication condition. After anger was induced, the decision making questionnaire could be administered. Contrasting these decision making questionnaires with subjects in the no alcohol condition would allow for an exploration of the changes in decision making that occur when alcohol is involved.

In summary this study is designed to serve as the beginning of a line of research to aid researchers and clinicians in testing whether social skills training is either necessary or effective as a treatment tool. The specific decision making skills deficits identified provide a basis for future research designed to measure and further understand decision making performance. In addition, the developing model has clinical implications suggesting both modifications or emphases of existing treatment components and a means to individualize treatment.

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FIGURE 1: Components of Recent Treatment Models

Domestic Abuse Intervention Project (Pence & Paymar, 1993)

Sessions (Treatment length: 24 weeks)

1. Defining violence and analyzing the use of violence
2. Understanding the use of violence as a tactic of control
3. Ending the use of violence
4. Defining non-threatening behavior and analyzing the use of intimidation
5. Understanding the use of intimidation as a tactic of control
6. Ending the use of intimidation
7. Defining respect and analyzing the use of emotional abuse
8. Understanding the use of emotional abuse as a tactic of control
9. Ending the use of emotional abuse
10. Defining support and trust and analyzing the use of isolation
11. Understanding the use of isolation as a tactic of control
12. Ending the use of isolation
13. Defining honesty and accountability and analyzing the use of minimization, denial, and blame
14. Understanding the use of minimization, denial, and blame as a tactic of control
15. Ending the use of minimization, denial, and blame
16. Defining sexual respect and analyzing the use of sexual abuse
17. Understanding the use of sexual abuse as a tactic of control
18. Ending the use of sexual abuse
19. Defining partnership and analyzing the use of male privilege, economic abuse, and the use of children
20. Understanding the use of male privilege, economic abuse, and the use of children as a tactic of control
21. Ending the use of male privilege, economic abuse, and the use of children
22. Defining negotiation and fairness and analyzing the use of coercion and threats
23. Understanding the use of coercion and threats as a tactic of control
24. Ending the use of coercion and threats

Teaching nonviolent behavior (specific components woven through group)

1. Taking time-outs/cool downs
2. Recognizing anger cues
3. Using positive self-talk
4. Acknowledging women's fear
5. Using assertive behavior
6. Accepting Women's anger
7. Being aware of nonverbal cues
8. Communicating feelings and thoughts
9. Letting go of control over your partner
10. Conflict resolution

Domestic Abuse Project (Weeks, 1993)

Orientation Sessions

1. Introduction/cycle of violence/escalation cues
2. Introduction to self -control plan, program rules

Education Sessions

1. Costs and payoffs of abusive behavior
2. Responsibility versus shame
3. ABC model and negative self-talk
4. Responsible assertive communication
5. Assertiveness: Role-playing
6. Culture of origin I: gender role stereotyping, sexuality and sexual abuse
7. Culture of origin II: Male power and control, privilege, and domination
8. Ending threats & controlling behavior
9. Stress and anger
10. Therapist exchange

Process Sessions

1. Process overview
2. Self-control plan
3. Taking responsibility: Most violent incident
4. Maintenance plan: Avoiding future violence

Learning To Live Without Violence (Sonkin & Durphy, 1989)

Sessions (Treatment length: 13 weeks)

1. Introduction to program
2. The Men, Women, and Children (effects of violence)
3. When someone tells you: "You have to go to counseling." (defensiveness)
4. Recognizing and controlling anger
5. Alcohol, other drugs and violence
6. Learning to listen to others
7. Feelings and communication
8. Becoming an assertive man
9. Stress reduction
10. Jealousy
11. Changing communication patterns with your partner (integrating skills learned in group)
12. What if she leaves
13. Where to go from here

Domestic Conflict Containment Program (Neidig, 1985)

Sessions (Treatment length: 10 weeks)

1. Introduction to the DCCP
2. Cycle of violence/escalation cues/time-outs
3. Self-talk
4. Anger management
5. Stress awareness/faulty cogntitions
6. Assertive communication
7. Conflict resolution
8. Decision-making/problem-solving
9. Jealousy
10. Preventing future violence

Cognitive-Behavioral Group Treatment for Male Spouse Abusers (Faulkner, et al, 1992)

Components (Treatment length: 5 sessions)

1. Anger management
   - anger logs
   - time-outs
   - ABC model
2. Communication Skills
3. Assertiveness
4. Problem-solving skills
5. Jealousy
6. Family of origin

Response Choice Rehearsal Group (McKay, Rogers, & McKay, 1989)

Sessions (Treatment length: 7 weeks)

1. Overview of RCR: Key attitude, asking for what you want
2. Negotiation and self-care
3. Getting information, acknowledging others, and withdrawal (time-out)
4. Switching: altering destructive behavior patterns
5. Role-playing RCR techniques and systematically desensitize to higher risk situations
6. Role-playing RCR techniques and systematically desensitize to higher risk situations
7. Role-playing RCR techniques and systematically desensitize to higher risk situations

When Anger Hurts: (McKay, Rogers, & McKay, 1989)

Components (Treatment length: indefinite/self-help)

1. The myths of anger
2. The physiological costs of anger
3. The interpersonal costs of anger
4. Anger as a choice: The two-step model of anger
5. Who is responsible?
6. Combating trigger thoughts
7. Controlling stress step by step
8. Stopping escalation
9. Coping through healthy self-talk
10. Response choice rehearsal
11. Problem-solving communication
12. Images of anger
13. Anger as a defense
14. Anger and children

Treating Wife Abuse: An Integrated Model (Pressman and Sheps, 1994)

Phases (Treatment length: 18-24 months)

1. Pre-group assessment and education
   -introduction to group, written contract, group rules
2. Establishing norms and promoting behavior change
   -time-outs, self-reflection, self-talk
3. Power and control in the group
   -use of group process to explore power and control dynamics
4. Healing therapy
   -exploration the effect of early experiences on current behavior, attitudes, and self-esteem
5. Terminating with the group

FIGURE 2
Treatment Outcome Studies

Author(s)	Sample Characteristics	Group Orientation	Treatment Approach	Treatment/ follow-up length	Outcome Measures	Limitations
Purdy & Nickle (1981)	170 men, 3% court referred	Gender-specific	cognitive-behavioral	Ave 7.8 sessions/ 6 month follow-up	Batterer interviews	No control group, batterer interviews only, men only
Halpern (1984)	70 men, 14% court referred	Gender-specific	cognitive-behavioral	32 sessions/3 to 24 month follow-up	CTS, victim reports	No control group, men only
Edleson et al (1985)	9 men, 0% court referred	Gender-specific	cognitive-behavioral	12 sessions/7 to 21 week follow-up	CTS, multiple baseline	No control group, men only, short follow-up, small n
Hawkins & Beauvais (1985)	106 men, 72% court referred	Gender-specific	cognitive-behavioral	1 to 6 group, 6 individ./6 mo	SCL-90 interview	No control group, men only, limited outcome measures
Dutton (1986)	100 men, 100% court referred	Gender-specific	cognitive-behavioral	16 group, 3 optional sessions/ 6months to 3 yrs	CTS, police reports	No control group, men only, no victim report
Hamberger & Hastings (1986)	71 men, court-ordered status not reported	Gender-specific	cognitive-behavioral	12 sessions/1 year follow-up	CTS Anger scale, MTFC, BDI AWS, Jealousy scale, MCSDS	No control group, men only, self-report

Treatment Outcome Studies (Continued)

Author(s)	Sample Characteristics	Group Orientation	Treatment Approach	Treatment/ follow-up length	Outcome Measures	Limitations
Edleson & Gruszynski (1989,1)	54 men, 9% court referred	Gender-specific	cognitive-behavioral	32 sessions/ 4-6 month ave.	CTS, telephone	No control group, men only, large drop rate at follow-up
Edleson & Gruszynski (1989,2)	42 men, 11% court referred	Gender-specific	cognitive-behavioral	32 sessions/ 4-6 month ave.	CTS, telephone	No control group, men only, large drop rate at follow-up
Edleson & Gruszynski (1989,3)	84 men, 7% court referred	Gender-specific	cognitive-behavioral	32 sessions/ 4-6 month ave.	CTS, telephone	No control group, men only, large drop rate at follow-up
Tolman & Bhosley (1989)	53 men, court-ordered status not reported	Gender-specific	cognitive-behavioral	26 sessions/ 6 month follow-up	CTS, structured interview	No control group, men only
Edleson & Syers (1990)	92 men, 38% court referred	Gender-specific	cognitive-behavioral 3 structures: educational self-help combined	12 or 32 sessions/ 18 month follow-up	CTS, victim reports	No control group, men only, large drop rate at follow-up
Edleson & Syers (1991)	70 men, 35.7% court referred	Gender-specific	follow-up to Edleson & Syer (1990)	12 or 32 sessions/ 18 month follow-up	CTS, victim reports	No control group, men only, large drop rate at follow-up

Treatment Outcome Studies (Continued)

Author(s)	Sample Characteristics	Group Orientation	Treatment Approach	Treatment/ follow-up length	Outcome Measures	Limitations
Deschner & McNeil (1986)	47 men & women, court-ordered status not reported.	Couples group	cognitive-behavioral	10 sessions/ 6-8 month follow-up	anger diaries, follow-up surveys	No control group, no validated outcome measures used
Shupe et al. (1986)	148 men and 96 women, court-ordered status not reported	Couples group	various	3 groups: all differed/FU varies	questionnaire	No control group, no validated outcome measures used
Brannen & Rubin (1996)	58 men and 2 women, 100% court referred	Both couples gender specific groups	cognitive-behavioral	13 sessions/ 4 months	MCTS, MSI, FAD	No control group
Faulkner, et al., (1992)	36 men, court-ordered status not reported	Gender-specific	cognitive-behavioral	8 sessions/1 yr follow-up	VBI, LOC, ASES, RS, MAACL, 16PF	No control group, men only, large drop-out rate for follow-up
Chen, et.al., (1989)	221 men, 100% court-ordered.	Gender-specific	cognitive-behavioral/ "Time-out program"	8 sessions/1 yr follow-up	Recidivism rates	Uncommon treatment, men only, outcome relied on arrest rates only.

Treatment Outcome Studies (Continued)

Author(s)	Sample Characteristics	Group Orientation	Treatment Approach	Treatment/ follow-up length	Outcome Measures	Limitations
Saunders & Hanusa (1986)	92 men, court-ordered status not reported	Gender-specific	cognitive-behavioral	12 group,. 8 supp./ FU not reported	CTS	No control group, men only, self-report
DeMaris & Jackson (1987)	53 men, 31% court referred	Gender-specific	cognitive-behavioral	12 wks required, add'l voluntary/ 1 year follow-up	survey	No control group, men only, self-report
Douglas & Perrin (1987)	20 men, 100% court referred	Gender-specific	unspecified	unspecified/follo w-up ave. 6 mos.	interview, police reports	No control group, unspecified intervention, small n, men only

Treatment Outcome Studies (Continued)

Author(s)	Sample Characteristics	Group Orientation	Treatment Approach	Treatment/ follow-up length	Outcome Measures	Limitations
Linquist et al. (1983)	16 men and women, court-ordered status not, reported	Couples group	cognitive-behavioral	9 session/6 month follow-up	standard questionnaire	No control group, no standardized outcome measures
Neidig , et al. (1985)	not reported	Couples group	cognitive-behavioral	10 sessions/pre-post follow-up	CTS, DAS, Assertiveness LOC	No control group, pre-post follow-up only
Leong et. al (1987)	67 men, court-ordered status not reported	Gender-specific	AMEND (Denver)	24 or 36 sessions/ 6 month follow-up	questionnaire	No control group, no standardized outcome measures
Shepard (1987)	77 men, mostly court referred	Gender-specific	cognitive-behavioral/ psycho-educational	12 sessions/12 month follow-up	checklist	No control group, no standardized outcome measures
Tolman et al. (1987)	48 men, court-ordered status not reported	Gender-specific	cognitive-behavioral	12-26 sessions/26 month follow-up	CTS, structured interview	No control group, men only

Adapted from Tolman & Bennet (1990)

FIGURE 3
Commonalties and differences in major theoretical frameworks

	Feminist/sociocultural	**Interpersonal/systemic**	**Individual psychopathology**
Critical factor/ acquisition **primary cause**	Social institutions/Men	High risk situations and relationships	Reinforcement for the and maintenance of violence
Who is responsible?	Men in general-violent men specifically	The individual and the dyad	The individual
Is violence learned?	Yes	Yes	Yes
Endorse the cycle of violence?	Yes	Yes	Yes
Treatment modality.	Community-based Interventions and gender-specific groups	Couples and couples groups	Gender-specific groups and individuals
Incorporate CBT in treatment?	Yes	Yes	Yes
Incorporate social skills training?	Yes	Yes	Yes

Table 1. Subject recruitment by source

Group	*Military Family Advocacy Programs*	*Family Crisis Center PG County*	*Community Advertisement*
Abusive	5	20	7
Distressed	1	0	31
Control	0	0	32

Table 2. Sample Characteristics

Group		*Educational Level (yrs)*	*Age (years)*		*Race*	
	n	mean (SD)	mean (SD)	African-American	White	Hispanic
Abusive	32	13.8 (1.9)	35.1 (8.7)	15	15	2
Distressed	32	14.6 (2.1)	35.9 (6.9)	14	17	1
Control	32	13.9 (2.0)	33.6 (3.7)	11	19	2

Table 3. Scale Scores to Determine Group Eligibility

	Mild Physical Violence Subscale	**Dyadic Adjustment Scale**	**General Functioning (FAD-III)**
Abusive Group	1.5 (.638)	89.4 (15.2)[ac]	2.11 (.21)[d]
Distressed Group	0 (0)	77.6 (12.7)[ab]	2.56 (.22)[de]
Control Group	0 (0)	113.9 (7.1)[bc]	1.91 (.47)[e]

[a] Abusive and Distressed groups significantly different ($F_{2,94}=3.26$, $p<.05$).
[b] Distressed and Control groups significantly different ($F_{2,94}=5.96$, $p<.001$).
[c] Abusive and Control groups significantly different ($F_{2,94}=5.07$, $p<.001$).
[d] Abusive and Distressed significantly different ($F_{2,94}=3.54$, $p<.01$).
[e] Distressed and Control groups significantly different ($F_{2,94}=4.97$, $p<.001$).

Table 4. Results of the order effect

	R squared change for Alternatives							
	COM	DN	PA	VA	THR	RPT	BEG	PET
STEP								
1. G	.001	.048*	.160**	.128**	.196**	.011	.048*	.085*
2. O	.011	.013	.007	.001	.031	.007	.001	.010
3. G x O	.026	.010	.012	.010	.030	.000	.024	.009

G - Group
O - Order
* - $p > .05$
** - $p > .01$
*** - $p > .001$

Behavioral alternatives abbreviations:
COM - Try to compromise with your spouse
RPT - Rethink your position and talk to spouse
DN - Do nothing
BEG - Beg and plead with your partner
PA - Act in a physically aggressive manner
VA - Act in a verbally aggressive manner
THR - Threaten or intimidate your spouse
PET - Act aggressively toward property or pets

Table 5. Group comparisons for alcoholism, depression and impulsivity.

Group	*ALCOHOLISM* Mean (SD) [Range]	*DEPRESSION* Mean (SD) [Range]	*IMPULSIVITY* Mean (SD) [Range]
Abusive	2.4 (3.7) [0-17]	7.1 (5.3)[a] [1-15]	9.2 (4.9) [7.7-13.3]
Distressed	1.9 (1.3) [0-4]	6.9 (4.1)[a] [0-17]	8.6 (4.7) [5.2-13.1]
Controls	2.2 (1.4) [0-4]	4.3 (4.2)[a] [0-10]	8.1 (3.8) [4.8-11.3]

[a] Controls are significantly different $\underline{F}_{1,95}$=3.96, p<.05

Table 6. Heart rate and blood pressure

Group	n[a]	*Baseline* Heart Rate	*Baseline* Systolic BP	*Baseline* Diastolic BP	*Interview* Heart Rate	*Interview* Systolic BP	*Interview* Diastolic BP
ARI total	44	71.8 (9.9)	125.4 (13.8)	72.9 (8.4)[d]	75.8 (11.1)	136.7 (16.7)[b]	81.7 (8.2)[c]
NRI total	46	71.3 (9.2)	128.7 (7.1)	77.1 (7.6)[d]	72.5 (8.8)	130.1 (12.7)[b]	77.8 (7.1)[c]

[a] data unavailable for six subjects

[b] significant difference – $\underline{F}_{2,94}$ = 4.78, p<.05

[c] significant difference – $\underline{F}_{2,94}$ = 4.32, p<.05

[d] significant difference - $\underline{F}_{2,94,}$ = 4.12, p<.05

Table 7. Regression Results Hypothesis 1

	R-squared Behavior							
	COM	DN	PA	VA	THR	RPT	BEG	PET
STEP								
1. G	.001	.048*	.160**	.128**	.196**	.011	.048*	.085*
2. A	.043*	.056	.188	.145	.208	.052*	.137**	.117
3. S	.044	.072	.197	.160	.211	.079	.057	.131
4. G x A	.045	.110*	.230*	.194*	.242*	.092	.201**	.153
5. G x S	.047	.149*	.231	.196	.249	.109	.229	.176
6. S x A	.083	.152	.258	.198	.264	.149*	.235	.185
7. G x A x S	.094	.161	.259	.199	.281	.151	.235	.185

G - Group
S - Situation
A - Anger condition
* - $p < .05$
** - $p < .01$
*** - $p < .001$

Behavior abbreviations:
COM - Try to compromise with your spouse
DN - Do nothing
PA - Act in a physically aggressive manner
VA - Act in a verbally aggressive manner
THR - Threaten or intimidate your spouse
RPT - Rethink your position and talk to spouse
BEG - Beg and plead with your partner
PET - Act aggressively toward property or pets

Table 8. Subjective Expected Utilities (SEUs) for the Behavior "Do nothing"

Group	*Anger Recall Interview*	*Neutral Recall Interview*	*Group Total*
Abusive	**48.1** (19.2)	37.1 (12.9)	41.2 (17.5)
Distressed	29.8 (16.6)	33.9 (13.3)	32.4 (14.6) **v**
Control	28.8 (12.3)	27.8 (14.3)	28.4 (13.6)
Condition Total	35.5 (16.0)	33.2 (13.5)	

Table 9. Subjective Expected Utilities (SEUs) for the Behavior "Physical Aggression"

Group	*Anger Recall Interview*	*Neutral Recall Interview*	*Group Total*
Abusive	**41.0** (15.0)	22.6 (12.9)	31.8 (14.1)
Distressed	14.4 (13.5)	15.8 (11.3)	15.1 (12.7) **v**
Control	8.5 (5.9)	8.4 (5.2)	8.4 (5.6) **v**
Condition Total	21.2 (11.4)	15.6 (9.8)	

Table 10. Subjective Expected Utilities (SEUs) for the Behavior "Verbal Aggression"

Group	*Anger Recall Interview*	*Neutral Recall Interview*	*Group Total*
Abusive	**44.5** (15.4)	31.5 (14.0)	35.9 (14.8)
Distressed	12.8 (8.4)	14.6 (9.2)	13.7 (8.9) **v**
Control	13.3 (11.3)	15.5 (10.6)	15.2 (10.9)
Condition Total	23.5 (11.7)	20.5 (11.2)	

Table 11. Subjective Expected Utilities (SEUs) for the Behavior "Threaten partner"

Group	*Anger Recall Interview*		*Neutral Recall Interview*	*Group Total*
Abusive	**40.8** (14.9)		25.5 (12.8)	30.3 (13.8)
Distressed	7.3 (5.9)	<	12.0 (10.3)	**v** 9.7 (7.7)
Control	9.3 (7.2)		12.6 (11.4)	10.9 (9.3)
Condition Total	18.8 (9.3)		16.7 (11.5)	

Table 12. Subjective Expected Utilities (SEUs) for the Behavior "Beg and plead with partner"

Group	*Anger Recall Interview*		*Neutral Recall Interview*	*Group Total*
Abusive	22.1 (12.0)	<	**51.0** (11.0)	40.2 (11.5)
Distressed	22.6 (11.1)	<	**v** 29.0 (12.9)	**v** 25.8 (11.6)
Control	27.8 (8.8)		30.2 (12.1)	28.7 (10.4)
Condition Total	24.6 (9.7)	<	38.4 (12.0)	

Table 13. Subjective Expected Utilities (SEUs) for the Behavior "Act aggressively toward pets and property"

Group	*Anger Recall Interview*		*Neutral Recall Interview*	*Group Total*
Abusive	24.3 (12.5)		28.9 (10.8)	26.7 (11.7)
Distressed	8.0 (3.4)		7.8 (4.9)	**v** 7.9 (4.2)
Control	10.3 (8.2)		8.7 (5.2)	9.9 (6.9)
Condition Total	14.2 (9.7)		15.1 (7.3)	

Table 14. Subjective Expected Utilities (SEUs) for the Behavior "Rethink position"

Group	*Anger Recall Interview*		*Neutral Recall Interview*	*Group Total*
Abusive	68.4 (14.7)		78.5 (16.9)	73.4 (15.8)
Distressed	68.3 (19.3)		75.0 (19.6)	71.7 (19.4)
Control	72.0 (13.1)		79.6 (15.2)	75.9 (14.1)
Condition Total	69.1 (15.6)	<	78.0 (17.2)	

Table 15. Subjective Expected Utilities (SEUs) for the Behavior "Compromise"

Group	*Anger Recall Interview*		*Neutral Recall Interview*	*Group Total*
Abusive	68.5 (9.5)		74.5 (9.4)	71.5 (9.4)
Distressed	66.5 (10.4)		74.7 (11.0)	70.6 (10.7)
Control	71.6 (8.1)		75.4 (9.5)	73.5 (8.8)
Condition Total	68.8 (9.1)	<	74.9 (9.8)	

Table 16. Between Groups differences for SEUs

Behavior	*Vector 1 - abusive group vs. distressed group*	*Vector 2 - abusive group vs. control group*
Compromise	B = .342	B = .243
Do nothing	B = 1.02*	B = 1.43*
Physical aggression	B = 10.1**	B = 8.92**
Verbal aggression	B = 9.25**	B = 8.34**
Threaten spouse	B = 11.9***	B = 11.6***
Rethink position	B = .412	B = .313
Beg and plead with spouse	B = 1.46*	B = 1.22*
Harm pets or property	B = 3.22*	B = 2.96*

* - p<.05 and >.01
** - p <.01 and >.001
*** - p<.001

Table 17. Attribute components for abusive and manipulative behaviors

Attribute Components	R-squared Change for Behaviors Abusive and Manipulative Behaviors					
	DN	PA	VA	THR	BEG	PET
1. Control	.102**	.173***	.154***	.135***	.035	.113***
2. Fix Problem	.057*	.075*	.066*	.071*	.013	.073*
3. Partner's Self-image	.003	.000	.068*	.061*	.000	.016
4. End Conflict	.012	.006	.001	.000	.000	.001
5. Other's Opinion	.030	.048	.018	.042	.036	.023
6. My Self-image	.005	.011	.000	.016	.001	.000
7. Marital Relationship	.001	.001	.004	.000	.004	.007

1. - Ability to influence or be in control
2. - Quickly ending the conflict
3. - Fixing the problem
4. - Other people's evaluation or opinion of me
5. - Outcome on my self image
6. - Outcome on my partner's self image
7. - Impact on marital relationship

* - $p < .05$
** - $p < .01$
*** - $p < .001$

Behavioral alternatives abbreviations:

DN - Do nothing
BEG - Beg and plead with your partner
PA - Act in a physically aggressive manner
VA - Act in a verbally aggressive manner
THR - Threaten or intimidate your spouse
PET - Act aggressively toward property or pets

Table 18. The impact of abusive and manipulative behaviors on "control"

Group	**Do Nothing*	**Physical Aggression*	**Verbal Aggression*	**Threaten your partner*	***Act out toward pets/ property*
1. Abusive-ARI	16.8 (22.6)[a]	16.0 (19.8)[b]	16.6 (20.2)[c]	17.2 (21.2)[d]	1.2 (1.3)[e]
2. Abusive-NRI	2.8 (3.4)[a]	5.7 (13.6)[b]	6.2 (12.8)[c]	6.1 (13.1)[d]	1.7 (2.2)[e]
3. Distressed-ARI	2.6 (2.8)[a]	3.9 (2.6)[b]	5.2 (4.1)[c]	3.5 (2.3)[d]	.24 (.05)[e]
4. Distressed-NRI	1.8 (1.5)[a]	3.7 (2.4)[b]	1.1 (2.7)[c]	3.2 (2.4)[d]	.56 (1.1)[e]
5. Control-ARI	2.7 (3.5)[a]	2.8 (4.5)[b]	2.4 (1.2)[c]	3.7 (2.3)[d]	.58 (.92)[e]
6. Control-NRI	1.7 (1.2)[a]	2.6 (1.7)[b]	3.7 (2.8)[c]	3.1 (4.7)[d]	.46 (1.5)[e]

[a] Group 1 significantly greater than the other five groups ($F_{1,95} = 5.31$, $p < .01$).
[b] Group 1 significantly greater than the other five groups ($F_{1,95} = 10.1$, $p < .001$).
[c] Group 1 significantly greater than the other five groups ($F_{1,95} = 7.74$, $p < .001$).
[d] Group 1 significantly greater than the other five groups ($F_{1,95} = 6.91$, $p < .01$).
[e] Groups 1 & 2 significantly greater than the other four groups ($F_{1,95} = 6.19$, $p < .01$).
* No differences exist between groups 2-6 so they were collapsed for this analysis and compared to group 1.
** No differences exist between groups 1-2 and 3-6 so they were collapsed for this analysis and compared to each other.

Table 19. The impact of abusive and manipulative behaviors on "fix the problem"

Group	**Do Nothing*	**Physical Aggression*	**Verbal Aggression*	**Threaten your partner*	**Act out toward pets/ property*
1. Abusive-ARI	17.2 (29.8)[a]	14.8 (30.4)[b]	17.6 (29.2)[c]	16.9 (29.5)[d]	14.1 (30.8)[e]
2. Abusive-NRI	6.8 (7.9)[a]	3.7 (6.3)[b]	4.1 (9.2)[c]	2.7 (3.8)[d]	2.5 (3.8)[e]
3. Distressed-ARI	6.6 (8.6)[a]	3.4 (7.5)[b]	3.4 (3.1)[c]	2.5 (3.2)[d]	1.5 (1.2)[e]
4. Distressed-NRI	5.7 (7.5)[a]	2.9 (7.1)[b]	3.3 (5.7)[c]	2.7 (4.6)[d]	1.7 (1.6)[e]
5. Control-ARI	5.6 (8.2)[a]	2.9 (6.3)[b]	2.8 (1.1)[c]	3.1 (6.3)[d]	1.9 (1.6)[e]
6. Control-NRI	5.4 (7.5)[a]	2.4 (1.5)[b]	3.2 (4.7)[c]	2.1 (1.9)[d]	1.8 (1.5)[e]

[a] Group 1 significantly greater than the other five groups ($F_{1,95} = 5.6$, $p < .01$.
[b] Group 1 significantly greater than the other five groups ($F_{1,95} = 9.8$, $p < .001$).
[c] Group 1 significantly greater than the other five groups ($F_{1,95} = 8.4$, $p < .001$).
[d] Group 1 significantly greater than the other five groups ($F_{1,95} = 15.1$, $p < .001$).
[e] Group 1 significantly greater than the other five groups ($F_{1,95} = 11.9$, $p < .001$).
* No differences exist between groups 2-6 so they were collapsed for this analysis and compared to group 1.

Table 20. The impact of abusive and manipulative behaviors on "Partner's Self-image"

Group	*Verbal Aggression*	*Threaten your partner*
1. Abusive-ARI	1.99 (1.9)[a]	1.51 (1.2)[b]
2. Abusive-NRI	.55 (.61)[a]	.54 (.64)[b]
3. Distressed-ARI	.61 (.82)[a]	.59 (.80)[b]
4. Distressed-NRI	.55 (.81)[a]	.77 (.96)[b]
5. Control-ARI	.66 (.66)[a]	.42 (.53)[b]
6. Control-NRI	.70 (1.1)[a]	.38 (.44)[b]

[a] Group 1 significantly greater than the other five groups ($F_{1,95} = 4.8$, $p < .05$).

[b] Group 1 significantly greater than the other five groups ($F_{1,95} = 6.3$, $p < .01$).

* No differences exist between groups 2-6 so they were collapsed for this analysis and compared to group 1.

Table 21. Importance rates for significant attributes by group

Attribute	*Abusive-ARI*	*Abusive - NRI*	*Distressed-ARI*	*Distressed-NRI*	*Control-ARI*	*Control-NRI*
Control	32.2 (23.3)[a]	14.5 (14.1)	13.2 (7.1)	6.9 (5.1)	4.5 (2.9)	11.6 (13.6)
Fix Problem	14.0 (7.5)[b]	13.8 (17.2)[b]	17.6 (8.7)	26.9 (12.4)	29.1 (10.2)[b]	29.6 (17.3)[b]
Partner's Self-image	11.5 (5.9)	6.8 (5.2)	10.6 (4.0)	8.6 (4.5)	11.8 (10.0)	12.0 (8.1)

[a] Abusive-ARI group significantly higher than the other five groups ($F_{1,95} = 4.8$, $p < .05$).

[b] Control groups significantly higher than the two abusive groups ($F_{1,95} = 3.8$, $p < .05$).

Table 22. Differences in Perceived Ability for the Behavior "Compromise"

Group	*Anger Recall Interview*		*Neutral Recall Interview*	*Group Total*
Abusive	**48.3** (18.3)[a]		85.0 (7.9)[a]	66.7 (13.1)
				^
Distressed	82.0 (12.3)		88.7 (11.6)	84.3 (11.9)
Control	86.1 (9.7)		96.7 (5.1)	91.3 (7.4)
Condition Total	72.1 (13.4)	<	90.1 (8.2)	

[a] ARI significantly lower for abusive group ($F_{1,95} = 40.7$, $p < .000$)

Table 23. Differences in Perceived Ability for the Behavior "Rethink your position"

Group	*Anger Recall Interview*		*Neutral Recall Interview*	*Group Total*
Abusive	**59.9** (25.5)[a]		71.9 (17.0)[a]	65.9 (21.3)
				^
Distressed	75.6 (21.8)		84.9 (11.8)	80.5 (16.8)
Control	85.0 (11.1)		88.7 (13.1)	86.8 (12.1)
Condition Total	73.5 (19.5)	<	81.8 (14.0)	

[a] ARI significantly lower for abusive group ($F_{1,95} = 2.27$, $p < .05$)

Table 24. Perceived Ability: Group by Anger condition for "Threaten your partner"

Group	*Anger Recall Interview*		*Neutral Recall Interview*	*Group Total*
Abusive	**20.7** (14.0)[a]		9.0 (8.5)[a]	14.9 (11.3)
				v
Distressed	2.7 (.34)		4.3 (4.2)	3.5 (2.3)
Control	4.2 (3.3)		3.6 (1.4)	3.9 (2.4)
Condition Total	9.2 (5.9)	>	5.6 (4.7)	

[a] NRI significantly lower for abusive group ($F_{1,95} = 7.39$, $p < .01$)

Table 25. Perceived Ability: Group by Anger condition for "Beg and Plead with partner"

Group	*Anger Recall Interview*		*Neutral Recall Interview*	*Group Total*
Abusive	**17.8** (19.2)[a]		47.0 (23.1)[a]	32.4 (21.1)
Distressed	27.4 (31.8)		34.5 (31.9)	31.0 (31.9)
Control	19.4 (14.1)		41.2 (36.1)	30.3 (25.1)
Condition Total	21.5 (21.7)	<	40.9 (30.4)	

[a] ARI significantly lower for abusive group ($F_{1,95} = 21.2$, $p < .000$)

APPENDIX 1: FOLLOW-UP SURVEY

Dear FAP staff,

Thank you very much for the opportunity to talk with you about my dissertation. Your support and enthusiasm is very much appreciated. As I mentioned, I am following up on our group conversation and asking if you can take a few minutes to complete this questionnaire. It is vital that I get several opinions about the behavioral options and motivating factors listed below. If I miss something vital, it will have a strong impact on the validity of my study. Below is an example vignette, several behavioral options and motivating factors that we discussed in our meeting. Please read through them and answer the questions below.

Example vignette:

1. Your friends ask you to do something fun with them. You are really looking forward to it, since it's a special event. But when you tell your partner about it, she begins to get upset. She says that she wanted to spend time with you. You explain that these are special plans and you are looking forward to them; you tell her that you'll make some other time to spend with her. However, she continues to be upset; she says that she wants you to cancel your plans so you can be with her

Behavioral alternatives for these situations

1. Compromise. Compromise usually involves each party communicating their side and giving in to some degree.

2. Avoid the problem. This alternative can involve side-tracking the issue, removing yourself from the conflict, or not doing anything.

3. Act in a physically aggressive manner. This alternative involves influencing your partner's behavior through the use of forceful or violent physical actions.

4. Act in a verbally aggressive manner. This alternative involves influencing your partner's behavior by harming her feelings and self-image.

5. Threaten or intimidate your partner. This alternative involves influencing your partner's behavior by making her think that you might harm her, take the children, leave her, or degrade her.

6. Rethink your position and talk to your spouse. This alternative involves taking some time to rethink your original position, usually by talking with your spouse and getting more information.

7. Fall apart and be rescued by your partner. This alternative involves becoming emotionally upset with the expectation that your partner will feel sorry for you and stop the conflict or give you your way.

8. Beg and plead with your partner. This alternative involves begging and pleading with your partner in order to get your way.

9. Act aggressively against property or pets. This alternative involves destroying property or harming pets as a way of influencing your partner's behavior.

Please take a few minutes to think if I missed anything. I need to make sure that I hit a broad range of behaviors.

Please write down any additional options that come to mind._____

_____

Are there any options that you think can be deleted?_____

_____

Below are listed a number of possible motivating factors/goals that might influence the behavioral options listed above.

Motivating factors/Goals

1. Ability to influence your partner or be in control.

2. Quickly ending the conflict.

3. Permanent resolution of the problem.

4. Other people's evaluation or opinion of me.

5. Outcome on my self-image.

6. Outcome on my partner's self-image.

7. Impact on marital relationship.

Please take a few minutes to think if I missed anything. I need to make sure that I hit a broad range of goals or motivating factors.

Please write down any additional options that come to mind.

_____

Are there any motivating factors that you think can be deleted?_____

_____

Thank you very much! Your assistance is invaluable. I will come by Tuesday evening, the 22nd of October to collect these.

Please give these to Tib Campise when you are finished. Also, feel free to contact me if you have any questions. My home phone number is (301) 599-6872. My number at school is (301) 295-3522.

Thanks again,

Capt. Randy Nedegaard

Date_____ Subject No._____

Form B
Overview

This task involves making ratings about your conflict resolution choices in your marriage. The purpose of this study is to gain a better understanding of how people make decisions in conflictual situations. It may take you 30-45 minutes to complete this questionnaire.

You may ask questions to clarify the instructions. Please do not discuss your answers with anyone. It is important that the responses you give are your own.

There are three parts to this task:

1. Part One: You will be given two different situations. You will be asked to write down as many alternative actions as you can think of during this part of the task.

2. Part Two: You will be asked to make several ratings about your ideas and behavior in two different situations. This is the major part of the task.

3. Part Three: You will be asked to give some basic information about yourself, such as your age.

PART ONE: OVERVIEW

You will be given a SITUATION to read. You are to imagine that this is happening to you now. You will be given two different marital conflict SITUATIONS (#1 & #2). For each SITUATION you will be asked to write down as many alternative responses as you can think of in a five minute period.

SITUATION #1

Instructions: Below is a description of a situation that involves marital conflict. Read the situation carefully and try to imagine yourself in this situation. Think about how you might FEEL and how you might ACT in this situation.

> You are going out to a movie with your spouse. The movie choice that the two of you had agreed on earlier is full and you must choose a different alternative. There is another movie that you are moderately interested in. However, your partner is not interested in seeing the movie and would rather do something different.

Now, think about all of the possible responses you might have in this situation. List them below. The interviewer will tell you when your time is up.

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

9._____

10._____

11._____

12._____

SITUATION #2

Instructions: Below is a description of a situation that involves marital conflict. Read the situation carefully and try to imagine yourself in this situation. Think about how you might FEEL and how you might ACT in this situation.

> You go shopping and buy a shirt that's very different from the kind you normally wear. The shirt was on sale, so you can't return it, but you like it and hope that your partner will, too. When you get home, you try it on and ask her what she thinks. She starts to giggle and says, "Well- uhm- If you really want to know, it's looks funny. It just isn't your style. I think you ought to take it back.

Now, think about all of the possible responses you might have in this situation. List them below. The interviewer will tell you when your time is up.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

PART TWO: OVERVIEW

You will be given a SITUATION to read. You are to imagine that this is happening to you now. You will be given two different marital conflict SITUATIONS (#1 & #2). For each SITUATION you will make several sets of ratings.

SITUATION #1

Instructions: Below is a description of a situation that involves marital conflict. Read the situation carefully and try to imagine yourself in this situation. Think about how you might FEEL and how you might ACT in this situation.

> You are planning your vacation with your spouse. You have been looking forward to this vacation for a long time and both you and your spouse can really use the break. You begin to look through vacation pamphlets and begin to find some vacation spots that appeal to you. You present your ideas to your spouse, but she is not very interested in the two vacation spots that you have picked out.

ACTION RATINGS

Next you will be given a list of ways a person might react to this situation. First read these actions and their definitions. Next you will be asked to rate how often you would react this way using the following five-point scale:

1	2	3	4	5
Never	Seldom	Sometimes	Usually	Always

Possible Actions:

1. Try to compromise with your spouse.
2. Do nothing.
3. Act in a physically aggressive manner.
4. Act in a verbally aggressive manner.
5. Threaten or intimidate your partner.
6. Rethink your position and talk to spouse
7. Beg and plead with your partner.
8. Act aggressively against property and pets

Definition of terms

The definitions of terms such as **aggressive, rethinking your position, or compromise** may be different for each person. Use YOUR own definition. Some guidelines follow:

Compromise. This alternative involves exchanging thoughts and feelings with your partner about the situation in a well composed manner. Compromise usually involves each party giving in to some degree rather than one person "caving in." It does not include escalating to the point of "blowing-up" on the part of either party.

Do nothing. This alternative involves avoiding the problem. This alternative can also involve removing yourself from the conflict by leaving the situation or simply "giving in" to your partner's request. It does not include leaving the situation because you have to go to work, make it to an appointment, etc. Avoidance does not occur because you don't care about the problem - but involves evasion of the conflict.

Act in a physically aggressive manner. This alternative involves influencing your partner's behavior through the use of forceful or violent physical actions. It can include

mild forms of aggression such as spitting, pinching and slapping to the more severe assaults such as choking, punching, and kicking.

Act in a verbally aggressive manner. This alternative involves influencing your partner's behavior by harming her feelings and self-image. This usually involves yelling, belittling or calling your partner names.

Threaten or intimidate your partner. This alternative involves influencing your partner's behavior by making her think that you might harm her, take the children, leave her, or degrade her in order to influence your partner's behavior.

Rethink your position and talk to spouse. This alternative involves taking some time to think over your position. Often, people will gather more information by doing things like talking to their spouse.

Beg and plead with your partner. This alternative involves begging and pleading with your partner in order to get your way. It does not involve honestly discussing your preferences with your partner and trying to lead to a compromise.

Act aggressively against property or pets. This alternative involves destroying property or harming pets as a way of influencing your partner's behavior. It can include punching walls, slamming doors, kicking the dog, etc.

REMEMBER - use YOUR definitions.

ACTION RATINGS

Please rate the ACTIONS below. Circle the number that corresponds to **how often** you would act this way in this SITUATION:

> You are planning your vacation with your spouse. You have been looking forward to this vacation for a long time and both you and your spouse can really use the break. You begin to look through vacation pamphlets and begin to find some vacation spots that appeal to you. You present your ideas to your spouse, but she is not very interested in the two vacation spots that you have picked out.

ACTIONS:

	Never	Seldom	Sometimes	Usually	Always
1. Try to compromise with your spouse.	1	2	3	4	5
2. Do nothing.	1	2	3	4	5
3. Act in a physically aggressive manner.	1	2	3	4	5
4. Act in a verbally aggressive manner	1	2	3	4	5
5. Threaten or intimidate your partner	1	2	3	4	5
6. Rethink your position, talk with your partner	1	2	3	4	5
7. Beg and plead with your partner.	1	2	3	4	5
8. Act aggressively against property and pets	1	2	3	4	5

PERSONAL ABILITY RATINGS

You are to rate the degree to which you believe that you are able to perform certain actions. Your task is to rate, using a scale from 1 to 100, your ability to perform the following actions. Refer to the earlier descriptions of the actions.

Please rate the ACTIONS below. Write a number that corresponds to **how well** you would be able to act this way in this SITUATION:

You are planning your vacation with your spouse. You have been looking forward to this vacation for a long time and both you and your spouse can really use the break. You begin to look through vacation pamphlets and begin to find some vacation spots that appeal to you. You present your ideas to your spouse, but she is not very interested in the two vacation spots that you have picked out.

1 100
Unable to perform — Completely able to perform

ACTIONS:

1. Try to compromise with your spouse. _____

2. Do nothing. _____

3. Act in a physically aggressive manner._____

4. Act in a verbally aggressive manner._____

5. Threaten or intimidate your partner._____

6. Rethink your position, talk with your partner._____

7. Beg and plead with your partner. _____

8. Act aggressively against property and pets. _____

GOAL/OUTCOME RATINGS

Below is a list of goals and outcomes that a may be relevant to a person in this SITUATION. Please read through the goals and their definitions on the following page and a half. Then rank them in their order of **importance** to you from 1 to 7. The goal or outcome you consider most important in this situation would get a 1. The second most important a ranking of 2, and so forth. Each number you supply must be unique. That is, you cannot have any ties in your rankings.

	Importance
1. Ability to influence or be in control.	_____
2. Quickly ending the conflict.	_____
3. Fixing the problem.	_____
4. Other people's evaluation or opinion of me.	_____
5. Outcome on my self-image.	_____
6. Outcome on my partner's self-image	_____
7. Impact on marital relationship.	_____

Goal/Outcome definitions:

1. **Ability to influence or be in control**. Certain courses of action would have different effects on whether or not you get your way in a situation. For example, being passive in a situation might leave you feeling like the other person is in charge while acting in a more aggressive fashion would leave you feeling like you were in control of the situation. For some people, it is important to get their way and for others it is not as important.

2. **Quickly ending the conflict**. Certain courses of action would have different effects on how long a conflict will last and how relieved you feel after the conflict is over. For example, some people "blow up" in an aggressive manner in order to quickly end a conflict and often feel a sense of relief in the short-term. Others act passively in order to end conflict quickly.

3. **Fixing of the problem**. Certain courses of action have different effects on how well conflict is resolved. Some people prefer to withstand stressful conflict in order to better resolve or "fix" the issue in the long-run. For example, talking about your thoughts and feelings might initially prolong the conflict, but relieve future stress because you permanently resolve the issue. Others might prefer to live with the problem in order to avoid conflict over it.

4. **Other people's evaluation or opinion of me**. Certain courses of action may be evaluated by another individuals differently. Some people worry a great deal about other's opinions or about embarrassing themselves while other people never give it a second thought. This may be relevant in situations where someone is with you and you are concerned about feeling embarrassed by your behavior. For example, if you act like a jerk in public, you might be concerned about what your partner thinking of you or about how strangers might evaluate your actions. Even if others are not present, thoughts of what someone else might think of you can influence your behavior.

5. **Outcome on my self-image.** Certain courses of action can influence how you feel about yourself. Sometimes doing certain things can make you feel good or proud about yourself. Other things can make you feel annoyed, angry or disgusted with yourself.

6. **Outcome on my partner's self-image**. Certain courses of action can influence how your partner feels about herself. Sometimes your actions can make her feel good or proud of herself. Other actions can make her feel worse about herself.

7. **Impact on marital relationship.** Certain courses of action can influence how close you feel to your partner or how distanced or detached you might be from her. For example, tense conflict situations can make some people feel alienated from one another. On the other hand, conflict can have a positive long-term impact on your relationship if it is properly resolved.

GOAL/OUTCOME RANKINGS

This time you will be presented with the same list of goals and outcomes as before. Your task is to take 100 points and distribute them among the goals. The number of points you assign to each goal should also reflect its relative importance. The least important goal or the most negative outcome should be assigned the lowest amount of points. The rest of the points should be assigned in a way that reflects how much more important or positive that goal or outcome is.

For example, if "impact on your self-image" is the least important outcome you might assign it 1 point. If "ability to be in control " is the next least important and also about two times as important as "impact on your self-image" you would give it a rating of 2.

If two outcomes/goals are equally important you may assign them the same number of points.

For example, if "ending conflict quickly" and "premanent resolution of the problem" are the next two least important you might assign them both 8 points each.

Remember you can only distribute a TOTAL of 100 points.

For example, for the above two examples the four ratings total 19 points. This means there are 81 points left to distribute.

1. Ability to influence or be in control. _____
2. Quickly ending the conflict. _____
3. Fixing the problem. _____
4. Other people's evaluation or opinion of me. _____
5. Outcome on my self-image. _____
6. Outcome on my partner's self-image _____
7. Impact on marital relationship. _____

Total 100

GOAL/OUTCOME RANKINGS (cont.)

Please rank the ACTIONS below for this SITUATION:

> You are planning your vacation with your spouse. You have been looking forward to this vacation for a long time and both you and your spouse can really use the break. You begin to look through vacation pamphlets and begin to find some vacation spots that appeal to you. You present your ideas to your spouse, but she is not very interested in the two vacation spots that you have picked out.

Your task is to take 100 points and distribute them among the goals. The number of points you assign to each goal should also reflect its relative importance. The least important goal or the most negative outcome should be assigned the lowest amount of points. The rest of the points should be assigned in a way that reflects how much more important or positive that goal or outcome is. Remember your SITUATION.

1. Ability to influence or be in control. _____
2. Quickly ending the conflict. _____
3. Fixing the problem. _____
4. Other people's evaluation or opinion of me. _____
5. Outcome on my self-image. _____
6. Outcome on my partner's self-image _____
7. Impact on marital relationship. _____

Total 100

ACTION by OUTCOME RATINGS

The final task for SITUATION #1 involves relating the Actions to the Goals/Outcomes. You will complete this task separately for each of the 8 Actions. You are to rate the degree to which the Action is likely to result in achieving the Goal/Outcome. Your task is to rate, using a scale from 1 to 100, the extent to which the Action will or will not lead to each particular Goal/Outcome. Refer to the earlier descriptions of the Actions and the definitions of the Goals/Outcomes.

For example, if you thought **threaten or intimidate your partner** would greatly increase your **ability to influence or be in control** you might rate it 80. You would then put 80 in the blank below the **ability to influence or be in control** scale.

Remember your current SITUATION:

You are planning your vacation with your spouse. You have been looking forward to this vacation for a long time and both you and your spouse can really use the break. You begin to look through vacation pamphlets and begin to find some vacation spots that appeal to you. You present your ideas to your spouse, but she is not very interested in the two vacation spots that you have picked out.

Given your SITUATION, consider the following action:

1. **Try to compromise with your spouse**.

What effect would **trying to compromise with your spouse** have on the following goals or outcomes?

1 100
No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100
Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

1. **Try to compromise with your spouse.** (Continued)

---

1 100
No resolution Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion Feel great about self

e. Outcome on my self-image. _____

---

1 100
Partner feels bad about herself Partner feels great about herself

_____

f. Outcome on my partner's self-image.

---

1 100
Feel very distant from spouse Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

2. **Do nothing.**

What effect would **not doing anything** have on the following goals and outcomes:

1 100
No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100
Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

1 100
No resolution — Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me — Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion — Feel great about self

e. Outcome on my self-image. _____

---

2. **Do nothing.** (Continued).

---

1 100

Partner feels bad about herself — Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100

Feel very distant from spouse — Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

3. **Act in a physically aggressive manner.**

What effect would **acting in a physically aggressive manner** have on the following goals and outcomes:

1 100

No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100

Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

3. **Act in a physically aggressive manner.** (Continued)

---

1 100
No resolution Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion Feel great about self

e. Outcome on my self-image. _____

---

1 100
Partner feels bad about herself Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100
Feel very distant from spouse Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

4. **Act in a verbally aggressive manner.**

What effect would **acting in a verbally aggressive manner** have on the following goals and outcomes:

1 100
No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100
Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

1 100
No resolution — Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me — Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion — Feel great about self

e. Outcome on my self-image. _____

---

4. **Act in a verbally aggressive manner.** (Continued)

1 100

Partner feels bad about herself — Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100

Feel very distant from spouse — Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

5. **Threaten or intimidate your partner.**

What effect would **threatening or intimidating your partner** have on the following goals and outcomes:

1 100

No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100

Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

5. **Threaten or intimidate your partner.** (Continued)

---

1 100
No resolution Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion Feel great about self

e. Outcome on my self-image. _____

---

1 100
Partner feels bad about herself Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100
Feel very distant from spouse Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

6. **Rethink your position, talk with your partner**

What effect would **rethink your position, talk with your partner** have on the following goals and outcomes:

1 100
No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100
Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

1 100
No resolution — Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me — Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion — Feel great about self

e. Outcome on my self-image. _____

---

6. **Rethink your position, talk with your partner**. (Continued)

1 100
Partner feels bad about herself — Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100
Feel very distant from spouse — Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

7. **Beg and plead with your partner**.

What effect would **begging and pleading with your partner** have on the following goals and outcomes:

1 100
No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100
Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

7. **Beg and plead with your partner**. (Continued)

1 100
No resolution Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion Feel great about self

e. Outcome on my self-image. _____

---

1 100
Partner feels bad about herself Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100
Feel very distant from spouse Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

8. Act aggressively against property and pets

What effect would **acting aggressively against property and pets** have on the following goals and outcomes:

1 100
No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100
Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

1 100
No resolution — Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me — Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion — Feel great about self

e. Outcome on my self-image. _____

---

8. **Act aggressively against property and pets.** (Continued)

---

1 100

Partner feels bad about herself — Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100

Feel very distant from spouse — Feel very close to spouse

g. Impact on marital relationship. _____

That was the end of ratings for **SITUATION #1**. Thank You!! One more situation to go.....

SITUATION #2

Now you will be asked to repeat the same task for the second and last SITUATION. Please refer to the definitions given for the first situation if you need a review.

And now you find yourself in the following SITUATION. Read the situation carefully and try to imagine yourself in this situation. Think about how you might FEEL and how you might ACT in this situation.

Your friends ask you to do something fun with them. You are really looking forward to it, since it's a special event. But when you tell your partner about it, she begins to get upset. She says that she wanted to spend time with you. You explain that these are special plans and you are looking forward to them; you tell her that you'll make some other time to spend with her. However, she continues to be upset; she says that she wants you to cancel your plans so you can be with her.

ACTION RATINGS

Please rate the ACTIONS below. Circle the number that corresponds to **how often** you would act this way in this SITUATION:

> Your friends ask you to do something fun with them. You are really looking forward to it, since it's a special event. But when you tell your partner about it, she begins to get upset. She says that she wanted to spend time with you. You explain that these are special plans and you are looking forward to them; you tell her that you'll make some other time to spend with her. However, she continues to be upset; she says that she wants you to cancel your plans so you can be with her.

ACTIONS:

	Never	Seldom	Sometimes	Usually	Always
1. Try to compromise with your spouse.	1	2	3	4	5
2. Do nothing.	1	2	3	4	5
3. Act in a physically aggressive manner.	1	2	3	4	5
4. Act in a verbally aggressive manner	1	2	3	4	5
5. Threaten or intimidate your partner	1	2	3	4	5
6. Rethink your position, talk with your partner	1	2	3	4	5
7. Beg and plead with your partner.	1	2	3	4	5
8. Act aggressively against property and pets	1	2	3	4	5

PERSONAL ABILITY RATINGS

You are to rate the degree to which you believe that you are able to perform the following Actions. Your task is to rate, using a scale from 1 to 100, your ability to perform the following actions. Refer to the earlier descriptions of the Actions.

Please rate the ACTIONS below. Write a number that corresponds to **how well** you would be able to act this way in this SITUATION:

Your friends ask you to do something fun with them. You are really looking forward to it, since it's a special event. But when you tell your partner about it, she begins to get upset. She says that she wanted to spend time with you. You explain that these are special plans and you are looking forward to them; you tell her that you'll make some other time to spend with her. However, she continues to be upset; she says that she wants you to cancel your plans so you can be with her.

1 100
Unable to perform — Completely able to perfom

ACTIONS:

1. Try to compromise with your spouse. _____

2. Do nothing. _____

3. Act in a physically aggressive manner._____

4. Act in a verbally aggressive manner._____

5. Threaten or intimidate your partner._____

6. Rethink your position, talk with your partner._____

7. Beg and plead with your partner. _____

8. Act aggressively against property and pets. _____

GOAL/OUTCOME RATINGS

Below is a list of goals and outcomes that may be relevant to a person in this SITUATION. Please read through the goals and their definitions on the following page and a half. Then rank them in their order of **importance** to you from 1 to 7. The goal or outcome you consider most important in this situation would get a 1. The second most important a ranking of 2, and so forth. Each number you supply must be unique. That is, you cannot have any ties in your rankings.

	Importance
1. Ability to influence or be in control.	_____
2. Quickly ending the conflict.	_____
3. Fixing the problem.	_____
4. Other people's evaluation or opinion of me.	_____
5. Outcome on my self-image.	_____
6. Outcome on my partner's self-image	_____
7. Impact on marital relationship.	_____

GOAL/OUTCOME RANKINGS (cont.)

Please rank the ACTIONS below for this SITUATION:

> Your friends ask you to do something fun with them. You are really looking forward to it, since it's a special event. But when you tell your partner about it, she begins to get upset. She says that she wanted to spend time with you. You explain that these are special plans and you are looking forward to them; you tell her that you'll make some other time to spend with her. However, she continues to be upset; she says that she wants you to cancel your plans so you can be with her.

Your task is to take 100 points and distribute them among the goals. The number of points you assign to each goal should also reflect its relative importance. The least important goal or the most negative outcome should be assigned the lowest amount of points. The rest of the points should be assigned in a way that reflects how much more important or positive that goal or outcome is. Remember your SITUATION.

1. Ability to influence or be in control. _____
2. Quickly ending the conflict. _____
3. Fixing the problem. _____
4. Other people's evaluation or opinion of me. _____
5. Outcome on my self-image. _____
6. Outcome on my partner's self-image _____
7. Impact on marital relationship. _____

Total 100

ACTION by OUTCOME RATINGS

The final task for SITUATION #2 involves relating the Actions to the Goals/Outcomes. You will complete this task separately for each of the 8 Actions. You are to rate the degree to which the Action is likely to result in achieving the Goal/Outcome. Your task is to rate, using a scale from 1 to 100, the extent to which the Action will or will not lead to each particular Goal/Outcome. Refer to the earlier descriptions of the Actions and the definitions of the Goals/Outcomes.

Remember your current SITUATION:

> Your friends ask you to do something fun with them. You are really looking forward to it, since it's a special event. But when you tell your partner about it, she begins to get upset. She says that she wanted to spend time with you. You explain that these are special plans and you are looking forward to them; you tell her that you'll make some other time to spend with her. However, she continues to be upset; she says that she wants you to cancel your plans so you can be with her.

Given your SITUATION, consider the following action:

1. **Try to compromise with your spouse**.

What effect would **trying to compromise with your spouse** have on the following goals or outcomes?

1 100
No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100
Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

1. **Try to compromise with your spouse.** (Continued)

---

1 100
No resolution Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion Feel great about self

e. Outcome on my self-image. _____

---

1 100
Partner feels bad about herself Partner feels great about herself

_____

f. Outcome on my partner's self-image.

---

1 100
Feel very distant from spouse Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

2. **Do nothing.**

What effect would **not doing anything** have on the following goals and outcomes:

1 100
No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100
Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

1 100
No resolution — Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me — Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion — Feel great about self

e. Outcome on my self-image. _____

---

2. **Do nothing.** (Continued).

---

1 100

Partner feels bad about herself — Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100

Feel very distant from spouse — Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

3. **Act in a physically aggressive manner.**

What effect would **acting in a physically aggressive manner** have on the following goals and outcomes:

1 100

No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100

Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

3. **Act in a physically aggressive manner.** (Continued)

---

1 100
No resolution Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion Feel great about self

e. Outcome on my self-image. _____

---

1 100
Partner feels bad about herself Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100
Feel very distant from spouse Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

4. **Act in a verbally aggressive manner.**

What effect would **acting in a verbally aggressive manner** have on the following goals and outcomes:

1 100
No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100
Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

1 100
No resolution — Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me — Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion — Feel great about self

e. Outcome on my self-image. _____

---

4. **Act in a verbally aggressive manner.** (Continued)

1 100

Partner feels bad about herself — Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100

Feel very distant from spouse — Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

5. **Threaten or intimidate your partner.**

What effect would **threatening or intimidating your partner** have on the following goals and outcomes:

1 100

No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100

Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

5. **Threaten or intimidate your partner.** (Continued)

---

1 100
No resolution Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion Feel great about self

e. Outcome on my self-image. _____

---

1 100
Partner feels bad about herself Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100
Feel very distant from spouse Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

6. **Rethink your position, talk with your partner**

What effect would **rethinking your position and talking with your partner** have on the following goals and outcomes:

1 100
No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100
Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

1 100
No resolution — Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me — Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion — Feel great about self

e. Outcome on my self-image. _____

---

6. **Rethink your position, talk with your partner**. (Continued)

1 100
Partner feels bad about herself — Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100
Feel very distant from spouse — Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

7. **Beg and plead with your partner**.

What effect would **begging and pleading with your partner** have on the following goals and outcomes:

1 100
No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100
Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

7. **Beg and plead with your partner.** (Continued)

1 100
No resolution Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion Feel great about self

e. Outcome on my self-image. _____

---

1 100
Partner feels bad about herself Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100
Feel very distant from spouse Feel very close to spouse

g. Impact on marital relationship. _____

****

Given your SITUATION, consider the following action:

8. **Act aggressively against property and pets**

What effect would **acting aggressively against property and pets** have on the following goals and outcomes:

1 100
No control or influence in this situation — Complete Control

a. Ability to influence or be in control. _____

---

1 100
Conflict drags on indefinitely — Immediate end to conflict

b. Quickly ending the conflict. _____

---

1 100
No resolution — Complete resolution

c. Fixing the problem. _____

---

1 100
Poor Opinion of me — Great opinion of me

d. Other people's evaluation or opinion of me. _____

---

1 100
Poor self opinion — Feel great about self

e. Outcome on my self-image. _____

---

8. **Act aggressively against property and pets.** (Continued)

---

1 100

Partner feels bad about herself — Partner feels great about herself

f. Outcome on my partner's self-image. _____

---

1 100

Feel very distant from spouse — Feel very close to spouse

g. Impact on marital relationship. _____

That was the end of ratings for **SITUATION #2**. Congratulations, bet your glad that's over! On to PART III ....

Part III

BASIC INFORMATION

1. How old are you? _____ yrs.

2. If you are in the military, what is your rank? _____

3. How many years of school have you completed? _____ yrs.

4. How long have you been married? ____mos ____ yrs.

5. How many children do you have? _____

6. Are you currently living with your spouse? Yes____ No_____

7. Have you and your spouse has any periods of separation? Yes____ No____

8. How long did you date you spouse before getting married? (Please give a specific number of months or years _____

9. Did you live together with your spouse (in the same residence for 5 days or more per week) before marriage? Yes_____ No_____

10. If yes, for how long did you live together? ____months _____years

11. Please circle the one racial/ethnic group that best describes you?

    a. African American
    b. Asian
    c. Caucasian
    d. Hispanic
    e. Native American/Eskimo
    f. Pacific Islander/Polynesian
    g. other _____

12. Has there ever been an incident of physical aggression between you and your spouse Yes_____ No_____

13. If yes, were you drinking during the time of the incident? Yes_____ No_____

14. Were you ever in a previous relationship (dating/marriage) that was physically aggressive? Yes_____ No_____

15. Have you or your spouse ever received mental health treatment for marital problems? Yes No

APPPENDIX 3: INSTRUMENTS

The following instruments are displayed in this appendix:

Beck Depression Inventory

Dyadic Adjustment Scale

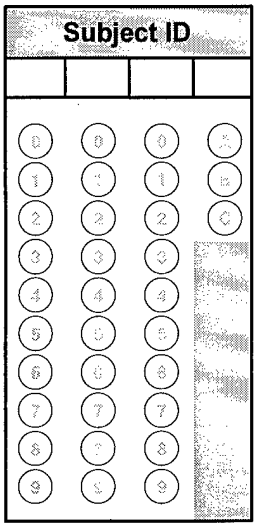
Eysenck Impulsivity Questionnaire (version 7)

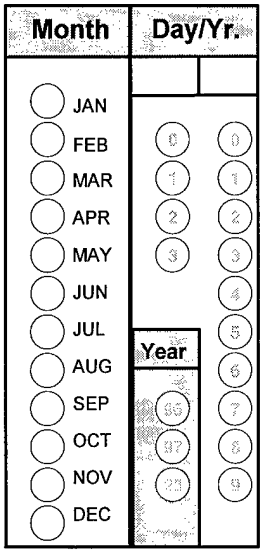
McMaster Family Assessment Devise (version 3)

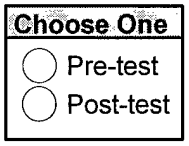
Michigan Alcohol Screening Test

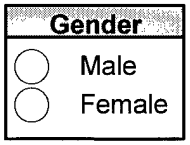
Modified Conflict Tactics Scale

Family Assessment Device - III









INSTRUCTIONS

This questionnaire contains a number of statements about families. Please read each statement carefully, and decide how well it describes your own family. You should answer according to how you see your family.

For each statement, there are four (4) possible responses:

Strongly Agree (SA) **Agree (A)** **Disagree (D)** **Strongly Disagree (SD)**

Try not to spend too much time thinking about each statement, but respond as quickly and as honestly as you can. If you have trouble with one, answer with your first reaction. Please be sure to answer every statement and mark all your answers in the bubbles provided beside each statement.

	SA	A	D	SD
1. Planning family activities is difficult because we misunderstand each other.	○	○	○	○
2. We resolve most everyday problems around the house.	○	○	○	○
3. When someone is upset the others know why.	○	○	○	○
4. When you ask someone to do something, you have to check that they did it.	○	○	○	○
5. If someone is in trouble, the others become too involved.	○	○	○	○
6. In times of crisis we can turn to each other for support.	○	○	○	○
7. We don't know what to do when an emergency comes up.	○	○	○	○
8. We sometimes run out of things that we need.	○	○	○	○
9. We are reluctant to show our affection for each other.	○	○	○	○
10. We make sure members meet their family responsibilities.	○	○	○	○
11. We cannot talk to each other about the sadness we feel.	○	○	○	○
12. We usually act on our decisions regarding problems.	○	○	○	○
13. You only get the interest of others when something is important to them.	○	○	○	○
14. You can't tell how a person is feeling from what they are saying.	○	○	○	○
15. Family tasks don't get spread around enough.	○	○	○	○
16. Individuals are accepted for what they are.	○	○	○	○

More questions on the back

Family Assessment Device - III

	SA	A	D	SD
17. You can easily get away with breaking the rules.	○	○	○	○
18. People come right out and say things instead of hinting at them.	○	○	○	○
19. Some of us just don't respond emotionally.	○	○	○	○
20. We know what to do in an emergency.	○	○	○	○
21. We avoid discussing our fears and concerns.	○	○	○	○
22. It is difficult to talk to each other about tender feelings.	○	○	○	○
23. We have trouble meeting our bills.	○	○	○	○
24. After our family tries to solve a problem, we usually discuss whether it worked or not.	○	○	○	○
25. We are too self-centered.	○	○	○	○
26. We can express feelings to each other.	○	○	○	○
27. We have no clear expectations about toilet habits.	○	○	○	○
28. We do not show our love for each other.	○	○	○	○
29. We talk to people directly rather than through go-betweens.	○	○	○	○
30. Each of us has particular duties and responsibilities.	○	○	○	○
31. There are lots of bad feelings in the family.	○	○	○	○
32. We have rules about hitting people.	○	○	○	○
33. We get involved with each other only when something interests us.	○	○	○	○
34. There's little time to explore personal interest.	○	○	○	○
35. We often don't say what we mean.	○	○	○	○
36. We feel accepted for what we are.	○	○	○	○
37. We show interest in each other when we can get something out of it personally.	○	○	○	○
38. We resolve most emotional upsets that come up.	○	○	○	○
39. Tenderness takes second place to other things in our family.	○	○	○	○
40. We discuss who is to do household jobs.	○	○	○	○
41. Making decisions is a problem for our family.	○	○	○	○
42. Our family shows interest in each other only when they can get something out of it.	○	○	○	○
43. We are frank with each other.	○	○	○	○
44. We don't hold to any rules or standards.	○	○	○	○
45. If people are asked to do something, they need reminding.	○	○	○	○
46. We are able to make decisions about how to solve problems.	○	○	○	○
47. If the rules are broken, we don't know what to expect.	○	○	○	○
48. Anything goes in our family.	○	○	○	○
49. We express tenderness.	○	○	○	○
50. We confront problems involving feelings.	○	○	○	○
51. We don't get along well together.	○	○	○	○
52. We don't talk to each other when we are angry.	○	○	○	○
53. We are generally dissatisfied with the family duties assigned to us.	○	○	○	○
54. Even though we mean well, we intrude too much into each others lives.	○	○	○	○
55. There are rules about dangerous situations.	○	○	○	○
56. We confide in each other.	○	○	○	○
57. We cry openly.	○	○	○	○
58. We don't have reasonable transport.	○	○	○	○
59. When we don't like what someone has done, we tell them.	○	○	○	○
60. We try to think of different ways to solve problems.	○	○	○	○

Beck Inventory

Subject ID

Choose One
- Pre-test
- Post-test

Gender
- Male
- Female

Month	Day/Yr.
JAN	
FEB	
MAR	
APR	
MAY	
JUN	
JUL	
AUG	
SEP	
OCT	
NOV	
DEC	

Year

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick the statement in each group which best describes the way you have been feeling the PAST WEEK, INCLUDING TODAY!

Fill in the bubble beside the statement you picked. If several statements in the group seem to apply equally well, fill in each one. Be sure to read all the statements in each group before making your choice.

1
- I do not feel sad.
- I feel sad.
- I am sad all the time and I can't snap out of it.
- I am so sad or unhappy that I can't stand it.

2
- I am not particularly discouraged about the future.
- I feel discouraged about the future.
- I feel I have nothing to look forward to.
- I feel that the future is hopeless and that things cannot improve.

3
- I do not feel like a failure.
- I feel I have failed more than the average person.
- As I look back on my life, all I can see is a lot of failure.
- I feel I am a complete failure as a person.

4
- I get as much satisfaction out of things as I used to.
- I don't enjoy things the way I used to.
- I don't get real satisfaction out of anything anymore.
- I am dissatisfied or bored with everything.

5
- I don't feel particularly guilty.
- I feel bad guilty a good part of the time.
- I feel guilty most of the time.
- I feel guilty all of the time.

6
- I don't feel I am being punished.
- I feel I may be punished.
- I expect to be punished.
- I feel I am being punished.

7
- I don't feel disappointed in myself.
- I am disappointed in myself.
- I am disgusted with myself.
- I hate myself.

8
- I don't feel I am any worse than anybody else.
- I am critical of myself for my weaknesses or mistakes.
- I blame myself all the time for my faults.
- I blame myself for everything bad that happens.

9
- I don't have any thoughts of killing myself.
- I have thoughts of killing myself, but I would not carry them out.
- I would like to kill myself.
- I would kill myself if I had the chance.

10
- I don't cry anymore than usual.
- I cry more now than I used to.
- I cry all the time now.
- I used to be able to cry, but now I can't cry even though I want to.

More questions on the back

Beck Inventory

11
- I am not more irritated now than I ever am.
- I get annoyed or irritated more easily than I used to.
- I feel irritated all the time now.
- I don't get irritated at all by the things that used to irritate me.

12
- I have not lost interest in other people.
- I am less interested in other people than I used to be.
- I have lost most of my interest in other people.
- I have lost all of my interest in other people.

13
- I make decisions about as well as I ever could.
- I put off making decisions more than I used to.
- I have greater difficulty in making decisions than before.
- I can't make decisions at all anymore.

14
- I don't feel I look any worse than I used to.
- I am worried that I am looking old or unattractive.
- I feel that there are permanent changes in my appearance that make me look unattractive.
- I believe that I look ugly.

15
- I can work as well as before.
- It takes an extra effort to get started at doing something.
- I have to push myself very hard to do anything.
- I can't do any work at all.

16
- I can sleep as well as usual.
- I don't sleep as well as I used to.
- I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
- I wake up several hours earlier than I used to and cannot get back to sleep.

17
- I don't get more tired than usual.
- I get tired more easily than I used to.
- I get tired from doing almost anything.
- I am too tired to do anything.

18
- My appetite is no worse than usual.
- My appetite is not as good as it used to be.
- My appetite is much worse now.
- I have no appetite at all anymore.

19
- I haven't lost much weight, if any lately.
- I have lost more than 5 pounds.
- I have lost more than 10 pounds.
- I have lost more than 15 pounds.

I am purposely trying to lose weight by eating less. Yes ◯ No ◯

20
- I am no more worried about my health than usual.
- I am worried about physical problems such as aches and pains, or upset stomach; or constipation.
- I am very worried about physical problems, and it's hard to think of much else.
- I am so worried about my physical problems, that I cannot think about anything else.

21
- I have not noticed any recent change in my interest in sex.
- I am less interested in sex than I used to be.
- I am much less interested in sex now.
- I have lost interest in sex completely.

Modified Conflict Tactics Scale

Subject ID

Month	Day/Yr.
JAN	
FEB	
MAR	
APR	
MAY	
JUN	
JUL	Year
AUG	
SEP	
OCT	
NOV	
DEC	

Choose One
Pre-test
Post-test

Gender
Male
Female

Instructions: No matter how well a couple gets along, there are times when they disagree on major decisions, get annoyed about something the other person does, or just have spats or fights because they're in a bad mood or tired or for some other reason. They also use many different ways of trying to settle their differences. On this questionnaire we would like you to report on conflicts you might have had with your partner over the past 14 weeks. For each statement, there are seven (7) possible responses as shown below. Please darken the number that best represents your situation.

0 = Never 1 = Once 2 = Twice 3 = 3-5 times 4 = 6-10 times 5 = 11-20 times 6 = More than 20 times

	0	1	2	3	4	5	6
1. A. Have you discussed the issue calmly?							
B. Has your spouse discussed the issue calmly?							
2. A. Have you gotten information to back up your side of things?							
B. Has your spouse gotten information?							
3. A. Have you tried to bring in someone to help settle things?							
B. Has your spouse.....							
4. A. Have you refused to give affection or sex to your spouse?							
B. Has your spouse.....							
5. A. Have you insulted or sworn at your spouse?							
B. Has your spouse.....							
6. A. Have you sulked and/or refused to talk about it?							
B. Has your spouse.....							
7. A. Have you stomped out of the room, house or yard?							
B. Has your spouse.....							
8. A. Have you cried?							
B. Has your spouse cried?							
9. A. Have you done or said something to spite your spouse?							
B. Has your spouse.....							
10. A. Have you threatened to leave the marriage?							
B. Has your spouse....							

More questions on the back

Modified Conflict Tactics Scale

For each statement, there are seven (7) possible responses:

0 = Never 1 = Once 2 = Twice 3 = 3-5 times 4 = 6-10 times 5 = 11-20 times 6 = More than 20 times

	0	1	2	3	4	5	6
11. A. Have you threatened to withhold money, have an affair, etc.?							
B. Has your spouse....							
12. A. Have you tried to control spouse physically (held down, etc.)							
B. Has your spouse...							
13. A. Have you threatened to hit or throw something at your spouse?							
B. Has your spouse...							
14. A. Have you thrown, smashed, hit, kicked something?							
B. Has your spouse...							
15. A. Have you driven recklessly to frighten your spouse?							
B. Has your spouse...							
16. A. Have you thrown something at your spouse?							
B. Has your spouse...							
17. A. Have you pushed, grabbed, or shoved spouse?							
B. Has your spouse...							
18. A. Have you slapped your spouse?							
B. Has your spouse...							
19. A. Have you kicked, bit or hit your spouse with a fist?							
B. Has your spouse...							
20. A. Have you choked or strangled your spouse?							
B. Has your spouse...							
21. A. Have you physically forced spouse to have sex?							
B. Has your spouse...							
22. A. Have you beat up your spouse?							
B. Has your spouse...							
23. A. Have you threatened spouse with a knife or gun?							
B. Has your spouse...							
24. A. Have you used a knife or gun on your spouse?							
B. Has your spouse...							

Michigan Alcohol Screening Test

Subject ID

Month JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Day/Yr.

Year

Gender
- Male
- Female

INSTRUCTIONS: Please blacken the circle which best reflects how you feel about each statement.

Yes	No	
		1. Do you feel that you are a normal drinker?
		2. Have you ever awakened the morning after drinking the night before and found that you could not remember a part of the evening before?
		3. Does your spouse (or parents) ever worry about your drinking?
		4. Can you stop drinking without a struggle after one or two drinks?
		5. Do you ever feel bad about your drinking?
		6. Do friends or relatives think you are a normal drinker?
		7. Do you ever try to limit your drinking to certain times of the day or to certain places?
		8. Are you always able to stop drinking when you want to?
		9. Have you ever attended a meeting of Alcoholics Anonymous (AA)?
		10. Have you ever gotten into fights when drinking?
		11. Has drinking ever created problems with you and your spouse?
		12. Has your spouse (or other family member) ever gone to anyone for help about your drinking?
		13. Have you ever lost friends or girlfriends/boyfriends because of drinking?
		14. Have you ever gotten into trouble at work because of drinking?
		15. Have you ever lost a job because of drinking?
		16. Have you ever neglected your obligations, your family, or your work for two or more days in a row because you were drinking?
		17. Do you ever drink before noon?
		18. Have you ever been told you have liver trouble? Cirrhosis?
		19. Have you ever had delirium tremens (DTs), severe shaking, heard voices, or seen things that weren't there after heavy drinking?
		20. Have you ever gone to anyone for help about your drinking?
		21. Have you ever been hospitalized because of drinking?
		22. Have you ever been a patient in a psychiatric hospital or on a psychiatric ward of a general hospital where drinking was part of the problem?
		23. Have you ever been seen at a psychiatric or mental health clinic, or gone to a doctor, social worker, or clergyman for help with an emotional problem in which drinking had played a part?
		24. Have you ever been arrested, even for a few hours, because of drunk behavior?
		25. Have you ever been arrested for drunk driving or driving after drinking?

Dyadic Adjustment Scale

Subject ID

Month: JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC

Day/Yr.

Year

Choose One: Pre-test, Post-test

Gender: Male, Female

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list. Use the following key in making your choices: 5 = Always agree 4 = Almost always agree 3 = Occasionally disagree 2 = Frequently disagree 1 = Almost always disagree 0 = Always disagree

5	4	3	2	1	0	
						1. Handling of family finances
						2. Matters of recreation
						3. Religious matters
						4. Demonstrations of affection
						5. Friends
						6. Sex relations
						7. Conventionality (correct or proper behavior)
						8. Philosophy of life
						9. Ways of dealing with parents or in-laws
						10. Aims, goals, and things believed important
						11. Amount of time spent together
						12. Making major decisions
						13. Household tasks
						14. Leisure time interests and activities
						15. Career decisions

Please indicate below approximately how often the following items occur between you and your partner. Use the following key in making your choices: 6 = Never 5 = Rarely 4 = Occasionally 3 = More often than not 2 = Most of the time 1 = All of the time

6	5	4	3	2	1	
						16. How often do you discuss or have you considered divorce, separation, or terminating the relationship?
						17. How often do you or your mate leave the house after a fight?
						18. In general, how often do you think things between you and your partner are going well?
						19. Do you confide in your mate?
						20. Do you ever regret that you married (or lived together)?
						21. How often do you and your partner quarrel?
						22. How often do you and your mate "get on each other's nerves?"

More questions on the back

Dyadic Adjustment Scale

23. Do you kiss your mate?

Every day ○ Almost every day ○ Occasionally ○ Rarely ○ Never ○

24. Do you and your mate engage in outside interests together?

All of them ○ Most of them ○ Some of them ○ Very few of them ○ None of them ○

Use the following key in making your choices:

1 = Never 2 = Less than once a month 3 = Once or twice a month 4 = Once a day 5 = More often

How often would you say the following events occur between you and your mate?

	1	2	3	4	5
25. Have a stimulating exchange of ideas	○	○	○	○	○
26. Laugh together	○	○	○	○	○
27. Calmly discuss something	○	○	○	○	○
28. Work together on a project	○	○	○	○	○

There are some things about which couples sometimes agree and sometimes disagree.
Indicate if either item below caused differences of opinions or problems in your relationship during the past few weeks.

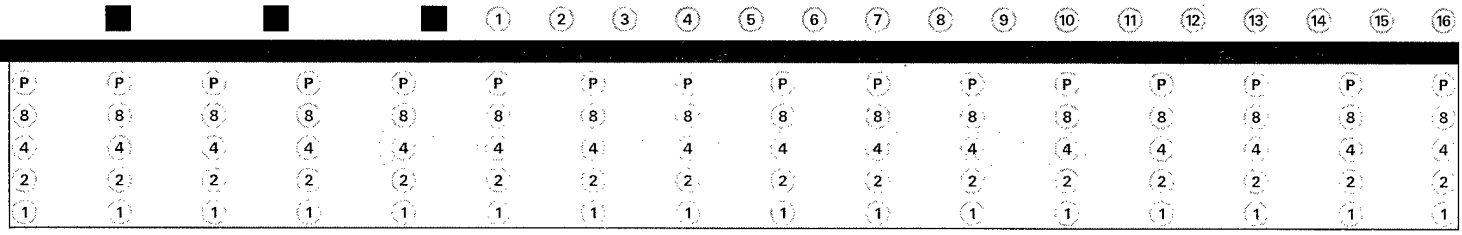
	Yes	No
29. Being too tired for sex	○	○
30. Not showing love	○	○

31. The numbers on the following line represent different degrees of happiness in your relationship. The middle point, "happy", represents the degree of happiness of most relationships. Please circle the number that best describes the degree of happiness, all things considered, of your relationship.

Extremely unhappy ○ Fairly unhappy ○ A little unhappy ○ Happy ○ Very happy ○ Extremely happy ○ Perfect ○

32. Please fill in the bubble of one of the following statements that best describes how you feel about the future of your relationship.

- ○ I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
- ○ I want very much for my relationship to succeed, and will do all that I can to see that it does.
- ○ I want very much for my relationship to succeed, and will do my fair share to see that it does.
- ○ It would be nice if my relationship succeeded, but I can't do much more than I am doing now to make it succeed.
- ○ It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.
- ○ My relationship can never succeed, and there is no more that I can do to keep the relationship going.



I.7

Age_____ ID number_____

Instructions--Please answer each question by darkening the circle indicating "Yes" (1) or "No" (2) following the question. There are no right or wrong answers, and no trial questions. Work quickly and do not think too long about the exact meaning of the question.

PLEASE REMEMBER TO ANSWER EACH QUESTION

YES-- 1
NO-- 2
3
4
5

1. Would you enjoy water skiing?	1	2	3	4	5
2. Do public displays of affection annoy you?	1	2	3	4	5
3. Do you often long for excitement?	1	2	3	4	5
4. Usually do you prefer to stick to brands you know are reliable, to trying new ones on the chance of finding something better?	1	2	3	4	5
5. Would you feel sorry for a lonely stranger in a group?	1	2	3	4	5
6. Do you quite enjoy taking risks?	1	2	3	4	5
7. Do you feel at your best after taking a couple of drinks?	1	2	3	4	5
8. Do you often get emotionally involved with your friends problems?	1	2	3	4	5
9. Do you save regularly?	1	2	3	4	5
10. Would you enjoy parachute jumping?	1	2	3	4	5
11. Do you think that people are too concerned about the feelings of animals?	1	2	3	4	5
12. Do you often buy things on impulse?	1	2	3	4	5
13. Would you prefer a job involving change, travel and variety even though it might be insecure?	1	2	3	4	5
14. Do unhappy people who are sorry for themselves irritate you?	1	2	3	4	5
15. Do you generally do and say things without stopping to think?	1	2	3	4	5
16. Do you prefer quiet Parties with good conversations to "wild" uninhibited ones?	1	2	3	4	5
17. Are you inclined to feel nervous when others around you seem to be nervous?	1	2	3	4	5
18. Do you often get into a jam because you do things without thinking?	1	2	3	4	5
19. Do you think hitchhiking is too dangerous a way to travel?	1	2	3	4	5
20. Do you find it silly for people to cry out of happiness?	1	2	3	4	5
21. Would you often like to get high (drinking liquor or smoking marijuana)?	1	2	3	4	5
22. Do you like diving off the high board?	1	2	3	4	5
23. Do people you are with have a strong influence on your moods?	1	2	3	4	5
24. Are you an impulsive person?	1	2	3	4	5
25. Do you welcome new and exciting experiences and sensations, even if they are a little frightening and unconventional?	1	2	3	4	5
26. Does it affect you very much when one of your friends seems upset?	1	2	3	4	5
27. Do you usually think carefully before doing anything?	1	2	3	4	5
28. Would you like to learn to fly an airplane?	1	2	3	4	5
29. Do you ever get deeply involved with the feelings of a character in a film, play or novel?	1	2	3	4	5
30. Do you often do things on the spur of the moment?	1	2	3	4	5
31. When the odds are against you, do you still usually think it worth taking a chance?	1	2	3	4	5
32. Do you get very upset when you see someone cry?	1	2	3	4	5
33. Do you often enjoy breaking rules you consider unreasonable?	1	2	3	4	5
34. Are you rather cautious in unusual situations?	1	2	3	4	5
35. Do you sometimes find someone else's laughter catching?	1	2	3	4	5
36. Do you mostly speak before thinking things out?	1	2	3	4	5
37. Would you make quite sure you had another job before giving up your old one?	1	2	3	4	5
38. Are you generally calm, even when others around are worried?	1	2	3	4	5

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PLEASE REMEMBER TO ANSWER EACH QUESTION

NO-- 2 3 4 5
YES-- 1

39. Do you often get involved in things you later wish you could get out of?----------	1	2	3	4	5
40. Do you prefer traditional to new, unusual and sometimes discordant music?----------	1	2	3	4	5
41. When a friend starts to talk about his problems, do you try to change the subject?----------	1	2	3	4	5
42. Do you get so "carried away" by new and exciting ideas, that you never think of possible snags?----	1	2	3	4	5
43. Do you find it hard to understand people who risk their necks climbing mountains?----------	1	2	3	4	5
44. Can you make decisions without worrying about other people's feelings?----------	1	2	3	4	5
45. Do you get bored more easily than most people, doing the same old things?----------	1	2	3	4	5
46. Do you prefer friends who are reliable to those who are excitingly unpredictable?----------	1	2	3	4	5
47. Do you find it hard to understand why some things upset people so much ?----------	1	2	3	4	5
48. Would you agree that planning things ahead takes the fun out of life?----------	1	2	3	4	5
49. Do you sometimes like doing things that are a bit frightening?----------	1	2	3	4	5
50. Can you remain in a good mood even if those around you are depressed?----------	1	2	3	4	5
51. Do you need to use a lot of self-control to keep out of trouble?----------	1	2	3	4	5
52. Would life with no danger in it be too dull for you?----------	1	2	3	4	5
53. Do you become more irritated than sympathetic when you see someone cry?----------	1	2	3	4	5
54. Would you agree that almost everything enjoyable is illegal or immoral?----------	1	2	3	4	5
55. Generally do you prefer to enter cold sea water gradually to diving or jumping straight in?----------	1	2	3	4	5
56. Are you often surprised at people's reactions to what you do or say?----------	1	2	3	4	5
57. Do you get extremely impatient if you are kept waiting by someone who is late?----------	1	2	3	4	5
58. Would you enjoy the sensation of skiing very fast down a high mountain slope?----------	1	2	3	4	5
59. Do you like watching people open presents?----------	1	2	3	4	5
60. Do you think an evening out is more successful if it is unplanned or arranged at the last moment?---	1	2	3	4	5
61. Would you like to go scuba diving?----------	1	2	3	4	5
62. Would you find it very hard to break bad news to someone?----------	1	2	3	4	5
63. Do you get very restless if you have to stay around home for any length of time?----------	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5

Please check to see that you have answered all the questions

APPENDIX 4: SUBJECT PHONE SCREEN

Hi, I am _____, a doctoral student in clinical psychology at the Uniformed Services University of the Health Sciences. Thank you for calling to express interest in this research study. The purpose of the study is to examine the different ways in which people think and act during marital conflict. The study involves coming in for one 2-3 hour visit where you will fill out some questionnaires, be interviewed by a clinical psychology doctoral student and complete several tasks. None of these procedures or tasks are harmful or dangerous in any way. For instance, there are no needles or blood draws or taking any drugs. We would also like to be able to briefly contact your spouse to have her complete one of the same questionnaires you will be completing should you choose to participate. For your participation, you will be compensated with a 15 dollar check. Do you think you might be interested in participating?

If "NO, say "Thank you anyway for your time. Good-bye.

If "YES," continue with the next part of the phone screen.

MARITAL DECISION MAKING SUBJECT RECRUITMENT FORM

DATE

NAME
ADDRESS

A. Are you in the military or a military dependent? YES NO

1 HOME PHONE

2 WORK PHONE

3 AGE _____ RACE

4 SERVICE ____ USAF ____ USN ____ USA ____ USMC

5 RANK: E- O-

6 HAVE YOU EVER BEEN INVOLVED IN THE FAP? YES NO

7 HAVE YOU HAD MARITAL PROBLEMS IN THE PAST SIX MONTHS YES NO

8 ARE YOU CURRENTLY TAKING ANY MEDICATION:

IF SO, WHAT ARE YOU TAKING?

9 HAVE YOU FELT DEPRESSED IN THE LAST MONTH? YES NO

10 IN THE PAST HAVE YOU EVER RECEIVED MENTAL HEALTH COUNSELING? YES NO

IF YES, CAN YOU TELL ME ABOUT THAT?

11. IS IT O.K. WITH YOU IF WE BRIEFLY CONTACT YOUR SPOUSE IF SHE AGREES TO IT? YES NO

Before I ask the final question, let me inform you that if you are military and answer "yes" to this question, this information may have to reported to your family advocacy program.

11 HAS THER EVER BEEN AN INCIDENT OF PHYSICAL AGGRESSION BETWEEN YOU AND YOU SPOUSE? YES NO
IF YES, HOW MANY_____ WHEN_____

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES
F. EDWARD HÉBERT SCHOOL OF MEDICINE
4301 JONES BRIDGE ROAD
BETHESDA, MARYLAND 20814-4799

Consent for Participation in a Research Study Examining Marital Conflict

(Version M.)

Title of Project: Decision Making in Marriage
Principal Investigator: Randall C. Nedegaard, M.S.W.

Name of Volunteer: _____

TO PERSONS WHO AGREE TO PARTICIPATE IN THIS STUDY:

The following information is provided to inform you about the research project and your participation in it. Please read this form carefully. Please feel free to ask any questions you may have about this study and/or about the information given below.

It is important that you understand that your participation in this study is totally voluntary. **You may refuse to participate or choose to withdraw from this study at any time.**

If, during the course of the study you should have any questions about the study, you participation in it or about your rights as a research subject, you may contact:

a. **Randall C. Nedegaard, M.S.W. at 301-295-3672** (Principal Investigator)
Department of Medical & Clinical Psychology, USUHS, Bethesda, MD 29814-4799
b. **Tracy Sbrocco, Ph.D., at 301-295-9674** (Academic Advisor)
Department of Medical & Clinical Psychology, USUHS, Bethesda, MD 29814-4799
c. **Research Administration at (301) 295-3303**

1. INDICATED BELOW ARE THE FOLLOWING:

a. THE PURPOSE OF THIS STUDY
b. THE PROCEDURES TO BE FOLLOWED
c. THE APPROXIMATE DURATION OF THE STUDY

1a. THE PURPOSE OF THIS STUDY:

Marital conflict is a problem for millions of Americans. Conflict can become so great with certain couples that they divorce or become aggressive with one another. Research studies show that certain situations are more difficult for married couples than others. The purpose of this study is to compare the decision making patterns of individuals across different situations. This study focuses on men only because it is still unclear whether women and men's decision making processes and attitudes differ.

1b. THE PROCEDURES TO BE FOLLOWED:

Men meeting several criteria will be asked to participate in a decision making study.

During this study, you will be asked to recall an interaction with your spouse that may or may not make you angry or frustrated. Next, you will be asked to complete a decision making questionnaire that asks about the way you think and act during marital conflict. Next, you will be asked to complete several other questionnaires that ask you questions about your psychological functioning and your marriage. Once you have completed the questionnaires, you will meet with the experimenter for a few minutes so that he can answer any questions that you may have about the study, the questions asked or your answers. If you have disclosed information that cannot be kept confidential (listed in section 7c of this consent form), this will be discussed with you. You have the right to decline to answer any particular question asked of you. If you seem distressed and may benefit from a referral the experimenter will discuss this with you and may make a referral. You will receive a follow-up phone call approximately one week after participation to answer any questions you may have, and/or to help with a referral if necessary.

If your spouse did not accompany you, you will be asked to bring a copy of a consent form to your spouse to get her permission to be contacted by the experimenter by the phone. If she is here with you now, she will be asked to provide answers to one of the questionnaires that you will complete today in order to help increase the accuracy of the information. Just like you, her consent is required and she will complete a similar consent form should she choose to participate. She will be free to withdraw this consent and stop participation in this study at any time for any reason. In most cases, your answers will not be revealed to your spouse and you will not be told her answers. The only exception to this would be if you threaten to harm your spouse and State law requires the experimenter to warn her. Also, if your spouse chooses to report violence and you have denied violent actions, this information will have to be referred to the Family Advocacy Program at your base or post.

1c. DURATION OF THE STUDY

This study will take approximately two to two and a half hours to complete.

2. THIS STUDY IS BEING DONE SOLELY FOR THE PURPOSES OF RESEARCH.

3. DISCOMFORTS, INCONVENIENCES AND/OR RISKS THAT CAN BE REASONABLY EXPECTED ARE:

a. The medical risks associated with this study are minor. You may find the interviews and the questionnaires may make you uncomfortable. During the interview where you recall situations that involve your spouse, you may experience anger and frustration. If you disclose information during the course of this study that must be reported (see section 7 for complete details) you may be subject to administrative action or be presecuted by the military justice system. You will NOT be forced to do anything you do not want to do. You may decline to participate at any time and/or withdraw your participation at any time.

b. If you or your spouse report violence, it may need to be reported to the family advocacy program. This procedure may be upsetting and uncomfortable. If you disclose other information that must be reported (see section 7c for specific information) this may also be upsetting and uncomfortable.

c. The study involves a small time commitment that you may find inconvenient. You will be asked to come to the university for one 2 - 2.5 hour appointment.

4. POSSIBLE BENEFITS TO YOU THAT MAY BE REASONABLY EXPECTED ARE: If it appears that you may be experiencing some problems either personally or in your marriage, you will receive a referral that may help you resolve your problem. Early detection and treatment of problems is often associated with better results. You will receive a follow-up phone call after participation to answer any questions you may have, and/or to help with a referral if necessary.

5. THE BENEFITS TO SCIENCE AND TO HUMANKIND THAT ARE SOUGHT IN THIS STUDY ARE: You will be providing information that will be helpful in expanding scientific knowledge about decision making in marriage. The results of this study will help us better understand what factors are associated with marital conflict.

6. ALTERNATE PROCEDURES THAT MAY BE ADVANTAGEOUS:
Not applicable.

7. YOUR RIGHTS, WELFARE, AND PRIVACY WILL BE PROTECTED IN THE FOLLOWING MANNER:

(a) Except as noted in (c) below, all data obtained about you during the course of this study will be treated with the same safeguards as all other sensitive medical records. It will be accessible to the principal investigator on this project, the academic advisor, the Family Advocacy Program (if you are currently involved with this program) and, if requested, to other federal investigative agencies with a need to know, IAW Air Force or DOD Instructions or Directives.

(b) Should the results of this project be published, you will be referred to only by number.

(c) If you are in the military and reveal information about committing a violation of the Uniformed Code of Military Justice (UCMJ), this information will need to be forwarded to the proper authorities. Following are some of the more important circumstances where a release of information is required by State and Federal Law and/or Military Regulation:

1. If you disclose information about the neglect or abuse of people under the age of 18, spouse abuse or abuse of those aged 65 or older, a report must be filed with the Family Advocacy Program that services your base or post. Physical abuse may include hitting, kicking, slapping, choking, biting or purposefully injuring the other person physically. Neglect refers to withholding necessary food, clothing, and/or shelter from vulnerable people such as children.

2. If you disclose a serious threat to the life of another or threaten to harm yourself, the security police must be notified immediately, and, in certain circumstances, the person you are threatening must be contacted.

3. If you disclose that you are abusing alcohol, using illegal drugs, or taking prescribed medications in an illegal manner, a report must go to your commander.

4. If you report that you have committed a crime, a report must go to the security police and/or local law enforcement agencies. State and Federal laws require disclosure of certain serious crimes or intent to commit such crimes by non-military as well as military subjects.

(d) If you are currently involved with the Family Advocacy Program a brief summary report which includes the scale scores from the completed questionnaires will be provided to the Family Advocacy Program where you are currently receiving services. This report will also include any disclosure of assaultive acts toward your spouse or threats to do further violence. If you are receiving treatment from the Family Advocacy Program, this information may improve your treatment.

Note: YOU ARE FREE TO WITHDRAW THIS CONSENT AND TO STOP PARTICIPATION IN THIS STUDY OR ANY ACTIVITY AT ANY TIME FOR ANY REASON.

Should you have any questions at any time about the study or about your rights you may contact:

a. Randy Nedegaard, M.S.W., at 301-295-3672 (Principal Investigator)
Department of Medical & Clinical Psychology,
b. Tracy Sbrocco, Ph.D., at 301-295-9674 (Academic Advisor)
Department of Medical & Clinical Psychology, USUHS, Bethesda, MD 29814-4799
c. Research Administration at (301) 295-3303

STATEMENT BY PERSON AGREEING TO PARTICIPATE IN THIS RESEARCH PROJECT:

I have read this consent form and I understand the procedures to be used in this study and the possible risks, inconveniences, and/or discomforts that may be involved. All of my questions have been answered. I freely and voluntarily choose to participate. I understand I may withdraw at any time. My signature also indicates that I have received a copy of this consent form for my information.

SIGNATURES:

_____	_____
Name of Witness (please print)	**Name of Volunteer** (please print)
_____	_____
Signature of Witness	**Signature of Volunteer**
_____	_____
Date	**Date**

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES
F. EDWARD HÉBERT SCHOOL OF MEDICINE
4301 JONES BRIDGE ROAD
BETHESDA, MARYLAND 20814-4799

Consent for Participation in a Research Study Examining Marital Conflict

(Version C.)

Title of Project: Decision Making in Marriage
Principal Investigator: Randall C. Nedegaard, M.S.W.

Name of Volunteer: _____

TO PERSONS WHO AGREE TO PARTICIPATE IN THIS STUDY:

The following information is provided to inform you about the research project and your participation in it. Please read this form carefully. Please feel free to ask any questions you may have about this study and/or about the information given below.

It is important that you understand that your participation in this study is totally voluntary. **You may refuse to participate or choose to withdraw from this study at any time.**

If, during the course of the study you should have any questions about the study, you participation in it or about your rights as a research subject, you may contact:

a. **Randall C. Nedegaard, M.S.W. at 301-295-3672** (Principal Investigator)
Department of Medical & Clinical Psychology, USUHS, Bethesda, MD 29814-4799
b. **Tracy Sbrocco, Ph.D., at 301-295-9674** (Academic Advisor)
Department of Medical & Clinical Psychology, USUHS, Bethesda, MD 29814-4799
c. **Research Administration at (301) 295-3303**

1. INDICATED BELOW ARE THE FOLLOWING:

a. **THE PURPOSE OF THIS STUDY**
b. **THE PROCEDURES TO BE FOLLOWED**
c. **THE APPROXIMATE DURATION OF THE STUDY**

1a. THE PURPOSE OF THIS STUDY:

Marital conflict is a problem for millions of Americans. Conflict can become so great with certain couples that they divorce or become aggressive with one another. Research studies show that certain situations are more difficult for married couples than others. The purpose of this study is to compare the decision making patterns of individuals across different situations. This study focuses on men only because it is still unclear whether women and men's decision making processes and attitudes differ.

1b. THE PROCEDURES TO BE FOLLOWED:

Men meeting several criteria will be asked to participate in a decision making study. During this study, you will be asked to recall an interaction with your spouse that may or may not make you angry or frustrated. Next, you will be asked to complete a decision making questionnaire that asks about the way you think and act during marital conflict. Next, you will be asked to complete several other questionnaires that ask you questions about your psychological functioning and your marriage. Once you have completed the questionnaires, you will meet with the experimenter for a few minutes so that he can answer any questions that you may have about the study, the questions asked or your answers. If you have disclosed information that cannot be kept confidential (listed in section 7c of this consent form), this will be discussed with you. You have the right to decline to answer any particular question asked of you. If you seem distressed and may benefit from a referral the experimenter will discuss this with you and may make a referral. You will receive a follow-up phone call approximately one week after participation to answer any questions you may have, and/or to help with a referral if necessary. Once you have completed the questionnaires, you will be paid $15 for your participation.

If your spouse did not accompany you, you will be asked to bring a copy of a consent form to your spouse to get her permission to be contacted by the experimenter by the phone. If she is here with you now, she will be asked to provide answers to one of the questionnaires that you will complete today in order to help increase the accuracy of the information. Just like you, her consent is required and she will complete a similar consent form should she choose to participate. She will be free to withdraw this consent and stop participation in this study at any time for any reason. In most cases, your answers will not be revealed to your spouse and you will not be told her answers. The only exception to this would be if you threaten to harm your spouse and State law requires the experimenter to warn her.

1c. DURATION OF THE STUDY

This study will take approximately two to two and a half hours to complete.

2. THIS STUDY IS BEING DONE SOLELY FOR THE PURPOSES OF RESEARCH.

3. DISCOMFORTS, INCONVENIENCES AND/OR RISKS THAT CAN BE REASONABLY EXPECTED ARE:

a. The risks associated with this study are minor. You may find the interviews and the questionnaires may make you uncomfortable. During the interview where you recall situations that involve your spouse, you may experience anger and frustration. You will NOT be forced to do anything you do not want to do. You may decline to participate at any time and/or withdraw your participation at any time.

b. If you disclose information that must be reported (see section 7c for specific information) this may also be upsetting and uncomfortable.

c. The study involves a small time commitment that you may find inconvenient. You will be asked to come to the university for one 2 - 2.5 hour appointment.

4. POSSIBLE BENEFITS TO YOU THAT MAY BE REASONABLY EXPECTED ARE: You will be paid $15 for your participation. If it appears that you may be experiencing some problems either personally or in your marriage, you will receive a referral that may help you resolve your problem. Early detection and treatment of problems is often associated with better results. Therefore, as a general procedure, all subjects will receive a list of community referrals on the last page of this consent form. You will receive a follow-up phone call after participation to answer any questions you may have, and/or to help with a referral if necessary.

5. THE BENEFITS TO SCIENCE AND TO HUMANKIND THAT ARE SOUGHT IN THIS STUDY ARE: You will be providing information that will be helpful in expanding scientific knowledge about decision making in marriage. The results of this study will help us better understand what factors are associated with marital conflict.

6. ALTERNATE PROCEDURES THAT MAY BE ADVANTAGEOUS:
Not applicable.

7. YOUR RIGHTS, WELFARE, AND PRIVACY WILL BE PROTECTED IN THE FOLLOWING MANNER:

(a) Except as noted in (c) below, all data obtained about you during the course of this study is kept confidential and accessible only to the principal investigator on this project and the academic advisor.

(b) Should the results of this project be published, you will be referred to only by number.

(c) Following are some of the more important circumstances where a release of information is required by State and Federal Law and/or Military Regulation:

1. If you disclose information about the neglect or abuse of people under the age of 18, a report must be filed with the Department of Human Services. Physical abuse may include hitting, kicking, slapping, choking, biting or purposefully injuring the other person physically. Neglect refers to withholding necessary food, clothing, and/or shelter from vulnerable people such as children.

2. If you disclose a serious threat to the life of another or threaten to harm yourself, the local police must be notified immediately, and, in certain circumstances, the person you are threatening must be contacted.

3. If you report that you have committed a crime, a report must go to the local law enforcement agencies. State and Federal laws require disclosure of certain serious crimes or intent to commit such crimes.

Note: YOU ARE FREE TO WITHDRAW THIS CONSENT AND TO STOP PARTICIPATION IN THIS STUDY OR ANY ACTIVITY AT ANY TIME FOR ANY REASON.

Should you have any questions at any time about the study or about your rights you may contact:

a. **Randy Nedegaard, M.S.W., at 301-295-3672 (Principal Investigator)**
   Department of Medical & Clinical Psychology,
b. **Tracy Sbrocco, Ph.D., at 301-295-9674 (Academic Advisor)**
   Department of Medical & Clinical Psychology, USUHS, Bethesda, MD 29814-4799
c. **Research Administration at (301) 295-3303**

STATEMENT BY PERSON AGREEING TO PARTICIPATE IN THIS RESEARCH PROJECT:

I have read this consent form and I understand the procedures to be used in this study and the possible risks, inconveniences, and/or discomforts that may be involved. All of my questions have been answered. I freely and voluntarily choose to participate. I understand I may withdraw at any time. My signature also indicates that I have received a copy of this consent form for my information.

SIGNATURES:

_____	_____
Name of Witness (please print)	**Name of Volunteer** (please print)
_____	_____
Signature of Witness	**Signature of Volunteer**
_____	_____
Date	**Date**

APPENDIX 7: SPOUSE CONTACT INFORMATION

Phone screen

Hi, I am _____, a doctoral student in clinical psychology at the Uniformed Services University of the Health Sciences. I am calling because we received your signed consent form indicating that you are willing to answer a few brief questions.

Is this still true? (If no, end the conversation. If yes, continue.)

Do you have five minutes right now? (If no, ask when you can call back. If yes, continue.)

For your information, the purpose of the study is to examine the different ways in which people think and act during marital conflict. Your husband has agreed to answer several questions about the way he acts and thinks during marital conflict. Your input is needed to obtain some information about what happens at home during marital conflict. You will be asked some specific questions about whether or not your husband has acted in a physically abusive manner with you.

For military personnel or dependents:

A. For individuals involved in FAP: The information you and your husband provide will be provided to the FAP in summary form.

B. For individual not involved in the FAP: Before I ask these questions, let me emphasize that if you reveal that your husband has been physically abusive toward you, this information will need to be referred to the family advocacy program at your base or post. Physically abusive behavior can include hitting, slapping, choking, biting, and any attempt to injure you physically. Referral to the family advocacy program may have a negative effect on his career in the military.

Do you understand this? (If no, explain further. If yes, proceed.)

Are you still willing to answer these questions? (If no, end the conversation. If yes, proceed.)

Before we begin, do you have any questions? (When all questions are answered, administer the MCTS)

Thank you for your participation. If you have further questions about this study, feel free to contact me at (301) 295-3672.

Spouse Cover Letter

Dear _____,

Your husband just completed a research study on marital conflict. During this study, your husband completed several questionnaires about marital conflict and decision making. In order to gain more complete information, your assistance is requested. If you agree to participate, you will be asked to answer one questionnaire that your spouse just completed. This will take approximately 5-10 minutes.

Enclosed in a copy of a consent form. Please look it over carefully if think you may be interested in participating. I will be calling you later to explain the study, ask if you have any questions regarding this form and ask if you want to participate. There is no pressure to participate in this study. If you do not want to participate in this study, simply tell me when I contact you. If you want to participate, after I call and we review the consent form I will ask you to return this form in the self addressed envelope provided. When I receive this form, I will give you another call and ask you 15 questions. This second call will take approximately 5 minutes.

If you have any questions in the meantime, feel free to contact me at (301) 295-3672.

Sincerely,

Randall C. Nedegaard, M.S.W.
Graduate Fellow

Consent for Participation in a Research Study Examining Marital Conflict

(Civilian Spouse Version)

Title of Project: Decision Making in Marriage
Principal Investigator: Randall C. Nedegaard, M.S.W.

Name of Volunteer: _____

TO PERSONS WHO AGREE TO PARTICIPATE IN THIS STUDY:

The following information is provided to inform you about the research project and your participation in it. Please read this form carefully. Please feel free to ask any questions you may have about this study and/or about the information given below.

It is important that you understand that your participation in this study is totally voluntary. **You may refuse to participate or choose to withdraw from this study at any time**.

If, during the course of the study you should have any questions about the study, you participation in it or about your rights as a research subject, you may contact:

a. Randall C. Nedegaard, M.S.W. at 301-295-3672 (Principal Investigator) Department of Medical & Clinical Psychology, USUHS, Bethesda, MD 29814-4799
b. Tracy Sbrocco, Ph.D., at 301-295-9674 (Academic Advisor) Department of Medical & Clinical Psychology, USUHS, Bethesda, MD 29814-4799
c. Research Administration at (301) 295-3303

1. INDICATED BELOW ARE THE FOLLOWING:
a. THE PURPOSE OF THIS STUDY
b. THE PROCEDURES TO BE FOLLOWED
c. THE APPROXIMATE DURATION OF THE STUDY

1a. THE PURPOSE OF THIS STUDY:

Marital conflict is a problem for millions of Americans. Conflict can become so great with certain couples that they divorce or become aggressive with one another. Research studies show that certain situations are more difficult for married couples than others. The purpose of this study is to compare the decision making patterns of individuals across different situations. This study focuses on men only because it is still unclear whether women and men's decision making processes and attitudes differ.

1b. THE PROCEDURES TO BE FOLLOWED:

Men meeting several criteria will be asked to participate in a decision making study. During this study, your husband was asked to recall an interaction with you that may or may not make him angry or frustrated. He was also asked to complete a decision making questionnaire as well as several other questionnaires that ask him questions about his psychological functioning and your marriage. Your husband will receive a follow-up phone call after participation to answer any questions he may have and/or to help with a referral if necessary. When he completed the questionnaires, he was be paid $15 dollars for participation in this study.

Wives are encouraged to accompany their spouses when they come to the University for their appointments. However, if you did not accompany your spouse, your husband was asked if you could be contacted by phone to ask if you would like to participate in this study. If he agreed, he was asked to bring a copy of this consent form to you. This does not mean you are participating in the study.

If you agree to it, you will be asked by phone to provide answers to one of the questionnaires that your husband completed in order to help gain additional information. Your consent is required should you choose to participate. This form you are reading is a consent form. Should you agree to participate, you will need to read and sign this consent form and send it back in the self-addressed stamped envelope provided by the experimenter. You will be free to withdraw this consent and stop participation in this study at any time for any reason. You have the right to decline to answer any particular question asked of you. In most cases, your answers will not be revealed to your spouse and your spouses answers will not be revealed to you. The only exception to this would be if one of you threatens to harm the other and State law requires the experimenter to warn them.

1c. DURATION OF THE STUDY

Your part of the study will take approximately five to ten minutes to complete.

2. THIS STUDY IS BEING DONE SOLELY FOR THE PURPOSES OF RESEARCH.

3. DISCOMFORTS, INCONVENIENCES AND/OR RISKS THAT CAN BE REASONABLY EXPECTED ARE:

a. The risks associated with this study are minor. You may find the questionnaire may make you uncomfortable. You will NOT be forced to do anything you do not want to do. You may decline to participate at any time and/or withdraw your participation at any time.
b. The study involves a small time commitment that you may find inconvenient. You will be called on the phone twice for a total of 5-10 minutes.

4. POSSIBLE BENEFITS TO YOU THAT MAY BE REASONABLY EXPECTED ARE: If it appears that you may be experiencing some problems either personally or in your marriage, you will receive a referral that may help you resolve your problem. Early detection and treatment of problems is often associated with better results. Therefore, as a general procedure, all subjects will receive a list of community referrals on the last page of this consent form.

5. THE BENEFITS TO SCIENCE AND TO HUMANKIND THAT ARE SOUGHT IN THIS STUDY ARE: You will be providing information that will be helpful in expanding scientific knowledge about decision making in marriage. The results of this study will help us better understand what factors are associated with marital conflict.

6. ALTERNATE PROCEDURES THAT MAY BE ADVANTAGEOUS: Not applicable.

7. YOUR RIGHTS, WELFARE, AND PRIVACY WILL BE PROTECTED IN THE FOLLOWING MANNER:

(a) All data obtained about you during the course of this study is usually kept confidential and accessible only to the principal investigator on this project and the academic advisor.

(b) Should the results of this project be published, you will be referred to only by number.

(c). The following are some of the more important circumstances where a release of information is required by State and Federal Law and Military Regulation:

1. If you disclose information about the neglect or abuse of people under the age of 18, spouse abuse or abuse of those aged 65 or older. A report must be filed with the Department of Human Services. Physical abuse such as hitting, kicking, slapping, choking, biting or purposefully injuring the other person physically. Neglect refers to withholding necessary food, clothing, and/or shelter from vulnerable people such as children.

2. If you report that you or your spouse have committed a crime, a report must go to local law enforcement agencies. State and Federal laws require disclosure of certain serious crimes or intent to commit such crimes.

Note: YOU ARE FREE TO WITHDRAW THIS CONSENT AND TO STOP PARTICIPATION IN THIS STUDY OR ANY ACTIVITY AT ANY TIME

FOR ANY REASON.

Should you have any questions at any time about the study or about your rights you may contact:

a. **Randy Nedegaard, M.S.W., at 301-295-3672 (Principal Investigator) Department of Medical & Clinical Psychology,**
b. **Tracy Sbrocco, Ph.D., at 301-295-9674 (Academic Advisor) Department of Medical & Clinical Psychology, USUHS, Bethesda, MD 29814-4799**
c. **Research Administration at (301) 295-3303**

STATEMENT BY PERSON AGREEING TO PARTICIPATE IN THIS RESEARCH PROJECT:

I have read this consent form and I understand the procedures to be used in this study and the possible risks, inconveniences, and/or discomforts that may be involved. All of my questions have been answered. I freely and voluntarily choose to participate. I understand I may withdraw at any time. My signature also indicates that I have received a copy of this consent form for my information.

SIGNATURES:

_____	_____
Name of Witness (please print)	**Name of Volunteer** (please print)
_____	_____
Signature of Witness	**Signature of Volunteer**
_____	_____
Date	**Date**

Consent for Participation in a Research Study Examining Marital Conflict

(Military Spouse Version)

Title of Project: Decision Making in Marriage
Principal Investigator: Randall C. Nedegaard, M.S.W.

Name of Volunteer: _____

TO PERSONS WHO AGREE TO PARTICIPATE IN THIS STUDY:

The following information is provided to inform you about the research project and your participation in it. Please read this form carefully. Please feel free to ask any questions you may have about this study and/or about the information given below.

It is important that you understand that your participation in this study is totally voluntary. **You may refuse to participate or choose to withdraw from this study at any time**.

If, during the course of the study you should have any questions about the study, you participation in it or about your rights as a research subject, you may contact:

a. Randall C. Nedegaard, M.S.W. at 301-295-3672 (Principal Investigator) Department of Medical & Clinical Psychology, USUHS, Bethesda, MD 29814-4799
b. Tracy Sbrocco, Ph.D., at 301-295-9674 (Academic Advisor) Department of Medical & Clinical Psychology, USUHS, Bethesda, MD 29814-4799
c. Research Administration at (301) 295-3303

1. INDICATED BELOW ARE THE FOLLOWING:
a. THE PURPOSE OF THIS STUDY
b. THE PROCEDURES TO BE FOLLOWED
c. THE APPROXIMATE DURATION OF THE STUDY

1a. THE PURPOSE OF THIS STUDY:

Marital conflict is a problem for millions of Americans. Conflict can become so great with certain couples that they divorce or become aggressive with one another. Research studies show that certain situations are more difficult for married couples than others. The purpose of this study is to compare the decision making patterns of individuals across different situations. This study focuses on men only because it is still unclear whether women and men's decision making processes and attitudes differ.

1b. THE PROCEDURES TO BE FOLLOWED:

Men meeting several criteria will be asked to participate in a decision making study. During this study, your husband was asked to recall an interaction with you that may or may not make him angry or frustrated. He was also asked to complete a decision making questionnaire as well as several other questionnaires that ask him questions about his psychological functioning and your marriage. Your husband will receive a follow-up phone call after participation to answer any questions he may have and/or to help with a referral if necessary.

Wives are encouraged to accompany their spouses when they come to the University for their appointments. However, if you did not accompany your spouse, your husband was asked if you could be contacted by phone to ask if you would like to participate in this study. If he agreed, he was asked to bring a copy of this consent form to you. This does not mean you are participating in the study.

If you agree to it, you will be asked by phone to provide answers to one of the questionnaires that your husband completed in order to help gain additional information. Your consent is required should you choose to participate. This form you are reading is a consent form. Should you agree to participate, you will need to read and sign this consent form and send it back in the self-addressed stamped envelope provided by the experimenter. You will be free to withdraw this consent and stop participation in this study at any time for any reason. You have the right to decline to answer any particular question asked of you. In most cases, your answers will not be revealed to your spouse and your spouses answers will not be revealed to you. The only exception to this would be if one of you threatens to harm the other and State law requires the experimenter to warn them. However, if you are currently involved in the Family Advocacy Program, a summary report of your comments and questionnaire scores will be provided to them.

1c. DURATION OF THE STUDY

Your part of the study will take approximately five to ten minutes to complete.

2. THIS STUDY IS BEING DONE SOLELY FOR THE PURPOSES OF RESEARCH.

3. DISCOMFORTS, INCONVENIENCES AND/OR RISKS THAT CAN BE REASONABLY EXPECTED ARE:

a. The medical risks associated with this study are minor. You may find the questionnaire may make you uncomfortable. If you disclose information during the course of this study that must be reported (see section 7 for complete details) your spouse may be subject to administrative action or be prosecuted by the military justice system. You will NOT be forced to do anything you do not want to do. You may decline to participate at any time and/or withdraw your participation at any time.

b. If you report violence during this time and are not currently enrolled in the Family Advocacy Program (FAP), it may need to be reported to the FAP and all study information will be forwarded to your servicing FAP. If you are currently enrolled in the FAP, a summary report will be sent to the FAP as listed in section 7d of this consent form.

c. The study involves a small time commitment that you may find inconvenient. You will be called on the phone twice for a total of 5-10 minutes.

4. POSSIBLE BENEFITS TO YOU THAT MAY BE REASONABLY EXPECTED ARE: If it appears that you may be experiencing some problems either personally or in your marriage, you will receive a referral that may help you resolve your problem. Early detection and treatment of problems is often associated with better results.

5. THE BENEFITS TO SCIENCE AND TO HUMANKIND THAT ARE SOUGHT IN THIS STUDY ARE: You will be providing information that will be helpful in expanding scientific knowledge about decision making in marriage. The results of this study will help us better understand what factors are associated with marital conflict.

6. ALTERNATE PROCEDURES THAT MAY BE ADVANTAGEOUS: Not applicable.

7. YOUR RIGHTS, WELFARE, AND PRIVACY WILL BE PROTECTED IN THE FOLLOWING MANNER:

(a) Except as noted in (c) below, all data obtained about you during the course of this study will be treated with the same safeguards as all other sensitive medical records. It will be accessible to the principal investigator on this project, the academic advisor, the Family Advocacy Program (if you are currently involved with this program) and, if requested, to other federal investigative agencies with a need to know, IAW Air Force or DOD Instructions or Directives.

(b) Should the results of this project be published, you will be referred to only by number.

(c) If you or your spouse are in the military and you reveal information about committing a violation of the Uniformed Code of Military Justice (UCMJ) by your spouse, this information will need to be forwarded to the proper authorities. The following are some of the more important circumstances where a release of information is required by State and

Federal Law and Military Regulation:

1. If you disclose information about the neglect or abuse of people under the age of 18, spouse abuse or abuse of those aged 65 or older. A report must be filed with the Family Advocacy Program that services your base or post. Physical abuse such as hitting, kicking, slapping, choking, biting or purposefully injuring the other person physically. Neglect refers to withholding necessary food, clothing, and/or shelter from vulnerable people such as children.

2. If you disclose a serious threat by your partner to harm you, the security police and/or family advocacy program must be notified immediately.

3. If you report that you or your spouse have committed a crime, a report must go to the security police and/or local law enforcement agencies. State and Federal laws require disclosure of certain serious crimes or intent to commit such crimes by non-military as well as military subjects.

(d) If you are currently involved with the Family Advocacy Program a brief summary report which includes the scale scores from the completed questionnaires will be provided to the Family Advocacy Program where you are currently receiving services. This report will also include any disclosure of assaultive acts toward your spouse or threats to do further violence. If you are receiving treatment from the Family Advocacy Program, this information may improve your treatment.

Note: YOU ARE FREE TO WITHDRAW THIS CONSENT AND TO STOP PARTICIPATION IN THIS STUDY OR ANY ACTIVITY AT ANY TIME FOR ANY REASON.

Should you have any questions at any time about the study or about your rights you may contact:

a. Randy Nedegaard, M.S.W., at 301-295-3672 (Principal Investigator) Department of Medical & Clinical Psychology,
b. Tracy Sbrocco, Ph.D., at 301-295-9674 (Academic Advisor) Department of Medical & Clinical Psychology, USUHS, Bethesda, MD 29814-4799
c. Research Administration at (301) 295-3303

STATEMENT BY PERSON AGREEING TO PARTICIPATE IN THIS RESEARCH PROJECT:

I have read this consent form and I understand the procedures to be used in

this study and the possible risks, inconveniences, and/or discomforts that may be involved. All of my questions have been answered. I freely and voluntarily choose to participate. I understand I may withdraw at any time. My signature also indicates that I have received a copy of this consent form for my information.

SIGNATURES:

Name of Witness (please print)	**Name of Volunteer** (please print)
Signature of Witness	**Signature of Volunteer**
Date	**Date**

REFERRAL LIST

If you are experiencing difficulties either personally or in your marriage, there are several places that you can go for help. This list is being provided to everyone who participates in the study on marital conflict as a courtesy. Below is a partial listing of programs that are specifically designed to help with marital conflict:

Prince Georges County:
Family Counseling Center: (301) 864-9101

Montgomery County:
Abused Persons Program: (301) 986-5885

State of Maryland:
Maryland Family Network: (301) 942-2912

Howard County:
Family Counseling Center: (410) 797-2272

Washington D.C.:
Affiliated Referral and Counseling Services (202) 659-1809
Center of Personal Enrichment (C.O.P.E.) (202) 223-5363

Northern Virginia:
Vogel Psychology Associates (703) 365-3900 ext. 21

An entire listing of mental health providers can also be found in the Yellow Pages under the headings: "Clinics"; "Marriage, Family, Child & Individual Counselors"; "Mental Health Services"; "Psychologists"; "Social Service Organizations"; or "Social Workers."

Your primary care physician is also available to discuss problems with if you prefer.

APPENDIX 8: DEBRIEFING PROCEDURE

After all questionnaires have been completed, sit down with each subject and provide a debriefing. The debriefing will contain the following:

"The purpose of my meeting with you at this time is to review the purpose of the study, answer any questions you may have about the study, the questions you were asked or your responses. This includes any feelings or concerns you may be having."

-Discuss the purpose of the study: (Decision making in marital conflict - specifically try to understand why people decide to compromise, become aggressive, etc.)

-Ask if the subject became angry during the recall task. Explain that half of the subjects were supposed to feel anger and frustration to study the effect of one's emotional state on their decision making.

-Discuss the feelings or concerns that the subject might have

-Answer any questions the subjects might have about the study, etc.

-Address referrals as appropriate

-Emphasize they may call at anytime to discuss options. Highlight the phone numbers on the consent form (PI, Dr. Sbrocco, REA)

-Inform subjects that their status will be reviewed at a weekly meeting of the PI and academic advisor.

-Remind subjects that they will be receiving a follow-up call from the PI.

-Re-administer State Anger Questionnaire to verify current anger state. Continue debriefing if state anger score is greater than 15.

APPENDIX 9: POWER ANALYSIS

Statistical Power Analysis for Perceived Ability ratings.

TOTAL N = 96 ALPHA = .05

	Number Levels	N Per Level	Effect Size	Degrees of Freedom	Power
Group	3	32	.35	2	.671
Situation	2	47	.13	1	.272*
Alternatives	8	12	.86	6	1.00
Group x Sit			.09	2	.129*
Group x Alt			.73	12	.985
Sit x Alt			.98	6	1.00
Group x Sit x Alt			.91	12	1.00